

GOMOS Level 2 Daily Report

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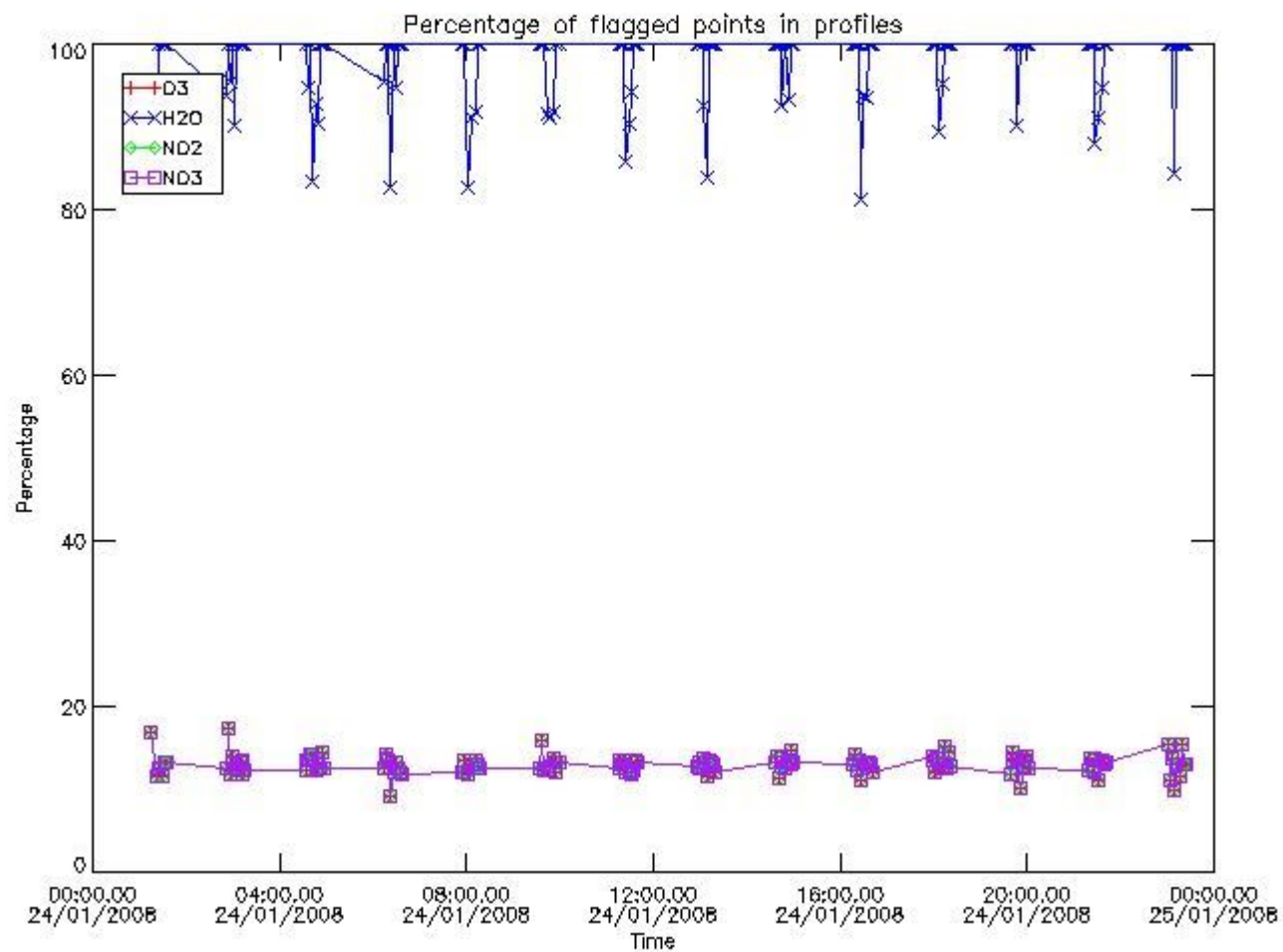
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397	GOM_NL__2PRFIN20080124_232031_000000402065_00245_30860_0548.N1	24-JAN-2008 23:20:31	Dark	39.500	46	Del Vel	1.9540	10600.	79	30860	No
398	GOM_NL__2PRFIN20080124_232307_000000392065_00245_30860_0549.N1	24-JAN-2008 23:23:07	Dark	39.000	34	Gam2Vel	1.7930	23000.	78	30860	No
399	GOM_NL__2PRFIN20080124_232514_000000402065_00245_30860_0550.N1	24-JAN-2008 23:25:14	Straylight	40.000	70	Zet Pup	2.2460	39000.	80	30860	No
400	GOM_NL__2PRFIN20080124_232643_000000402065_00245_30860_0551.N1	24-JAN-2008 23:26:43	Straylight	40.000	117	Pi Pup	2.7060	3800.0	80	30860	No
401	GOM_NL__2PRFIN20080124_232912_000000432065_00245_30860_0552.N1	24-JAN-2008 23:29:12	Straylight	42.500	23	21Eps CMa	1.5020	26000.	85	30860	No
402	GOM_NL__2PRFIN20080124_233035_000000392065_00245_30860_0553.N1	24-JAN-2008 23:30:35	Straylight	39.000	179	24Omi2CMa	3.0320	24000.	78	30860	No
403	GOM_NL__2PRFIN20080124_233245_000000492065_00245_30860_0554.N1	24-JAN-2008 23:32:45	Straylight	49.000	1	9Alp CMa	-1.4400	11000.	98	30860	No
404	GOM_NL__2PRFIN20080124_233956_000000522065_00245_30860_0555.N1	24-JAN-2008 23:39:56	Bright	52.000	14	58Alp Ori	0.87000	3000.0	104	30860	No
405	GOM_NL__2PRFIN20080124_234205_000000392065_00245_30860_0556.N1	24-JAN-2008 23:42:05	Bright	38.500	44	24Gam Gem	1.9280	11000.	77	30860	No
406	GOM_NL__2PRFIN20080124_234351_000000402065_00245_30860_0557.N1	24-JAN-2008 23:43:51	Bright	39.500	151	13Mu Gem	2.8900	3000.0	79	30860	No
407	GOM_NL__2PRFIN20080124_234609_000000362065_00245_30860_0558.N1	24-JAN-2008 23:46:09	Bright	36.000	28	12Bet Tau	1.6500	15200.	72	30860	No
408	GOM_NL__2PRFIN20080124_234805_000000362065_00245_30860_0559.N1	24-JAN-2008 23:48:05	Bright	35.500	107	37The Aur	2.6490	11000.	71	30860	No
409	GOM_NL__2PRFIN20080124_235013_000000352065_00245_30860_0560.N1	24-JAN-2008 23:50:13	Bright	34.500	42	34Bet Aur	1.9000	10200.	69	30860	No

3. Quality information per product

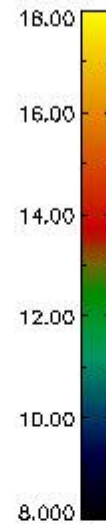
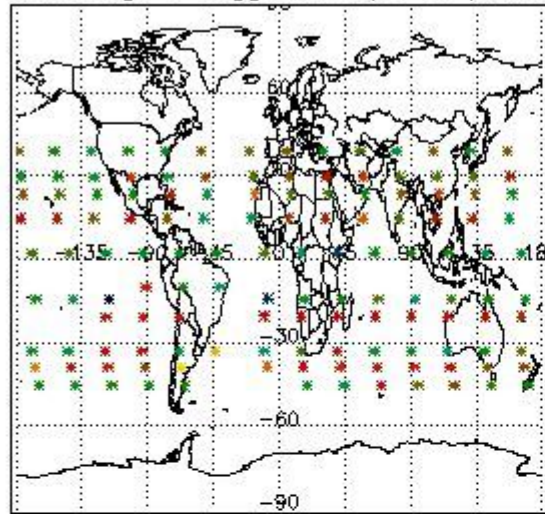
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

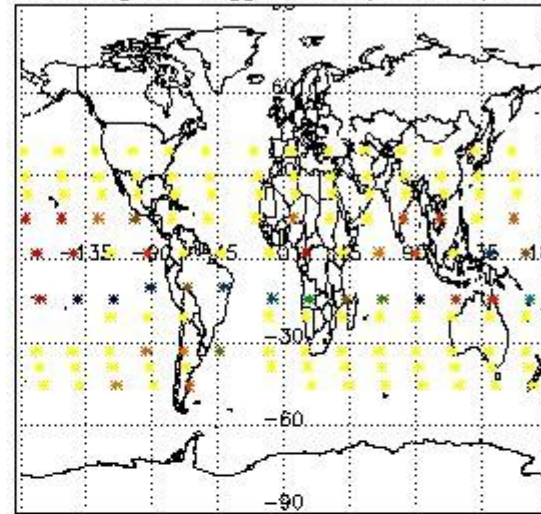


3.2 Plot quality information per product (world map)

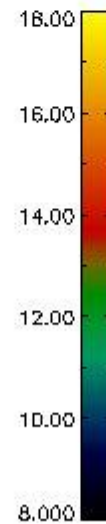
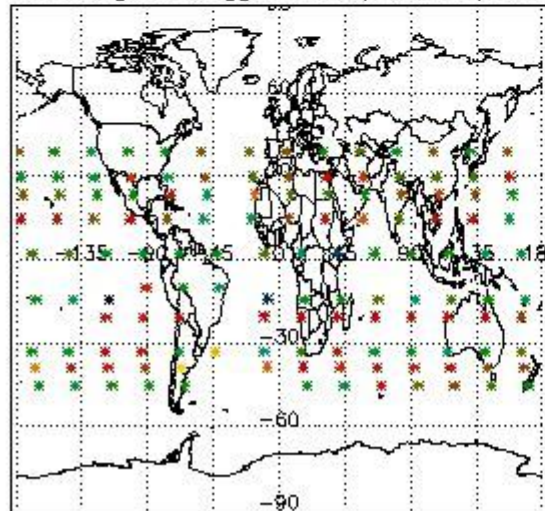
Percentage of flagged data per O3 profile



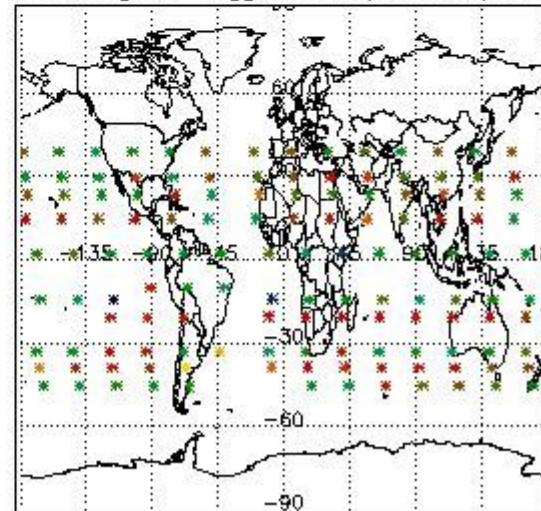
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

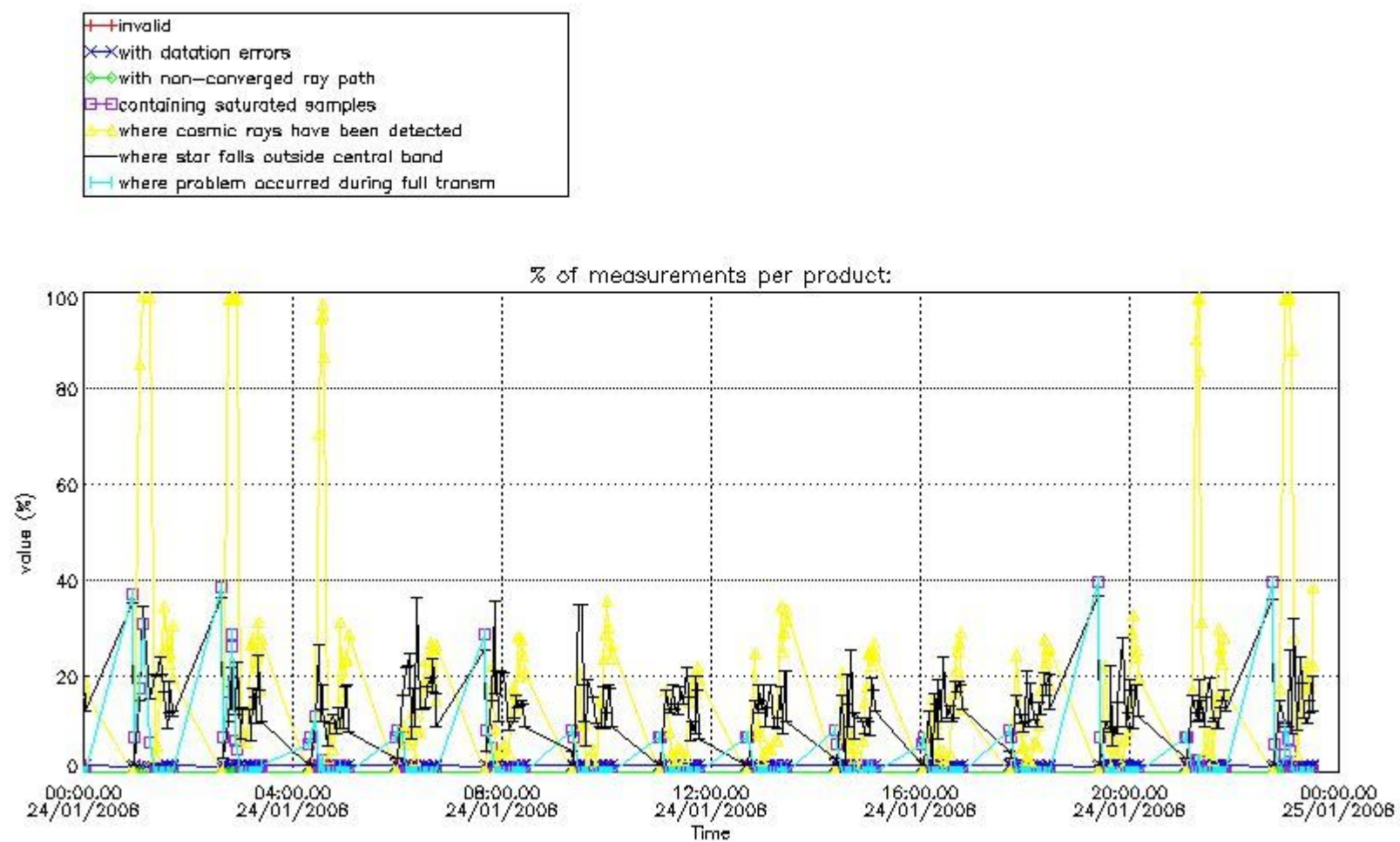


4. Level 1 quality information per product

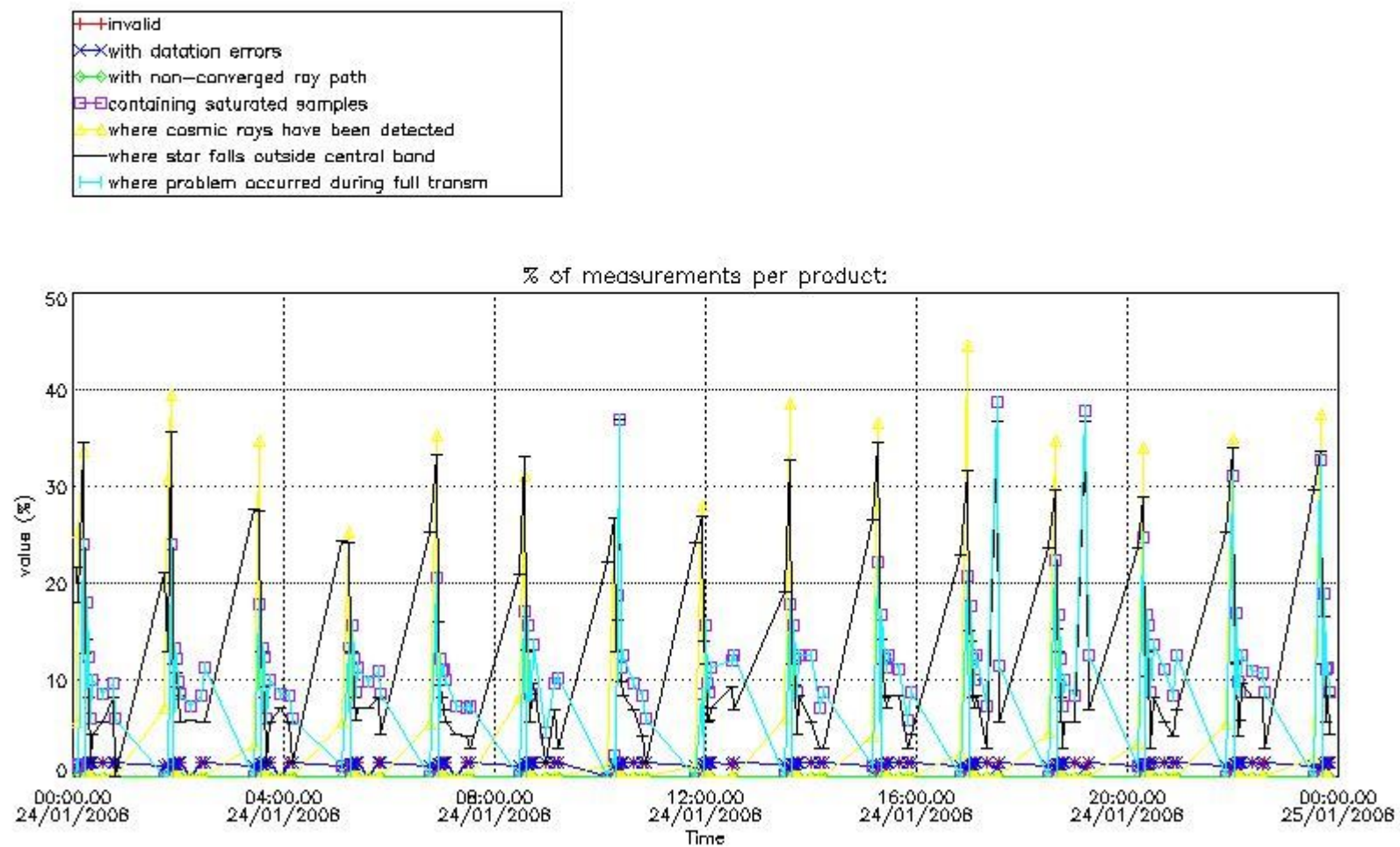
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

4.1 Plot quality information per product (time dependant) coming from level 1b processing

4.1.1 Plot level 1 quality information per product (time dependant): ENVISAT ASCENDING passes

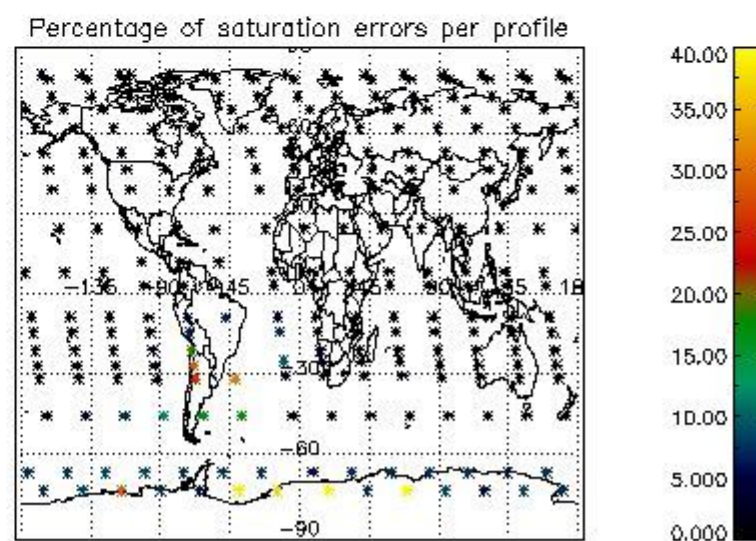
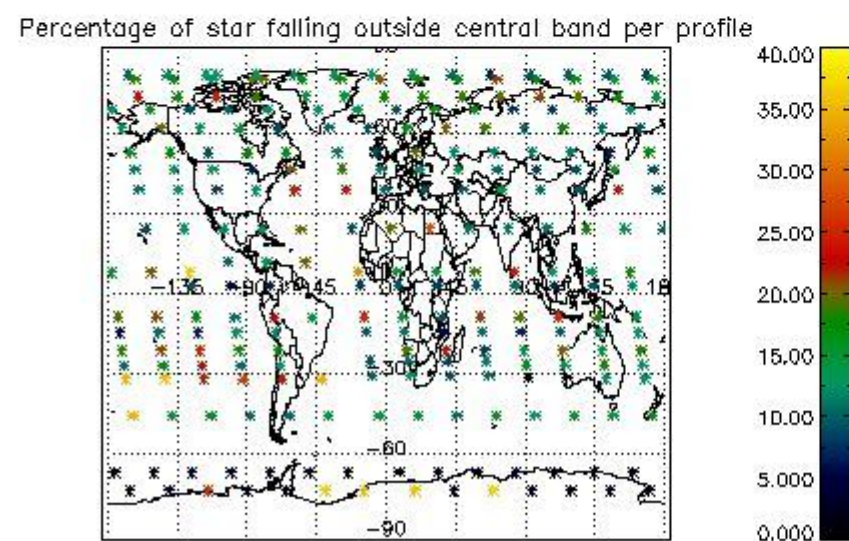
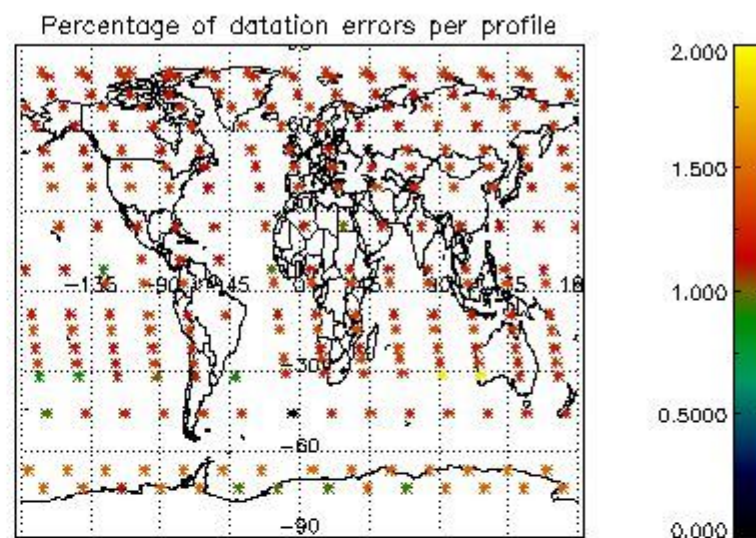
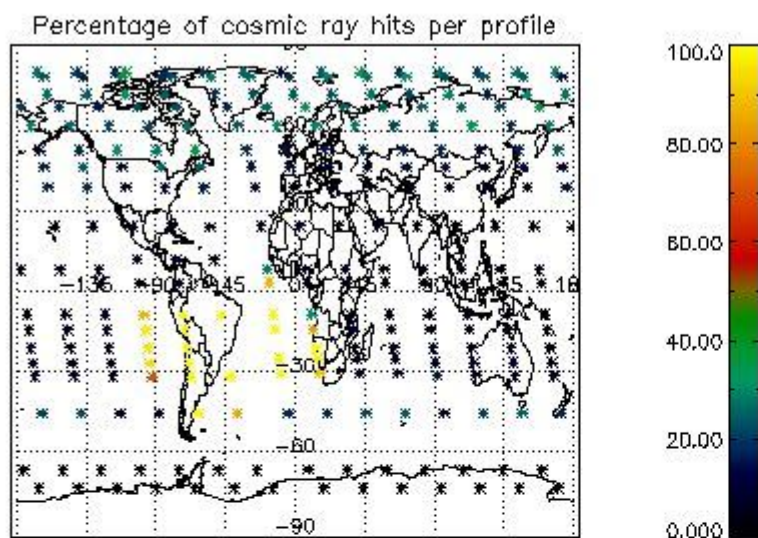


4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes

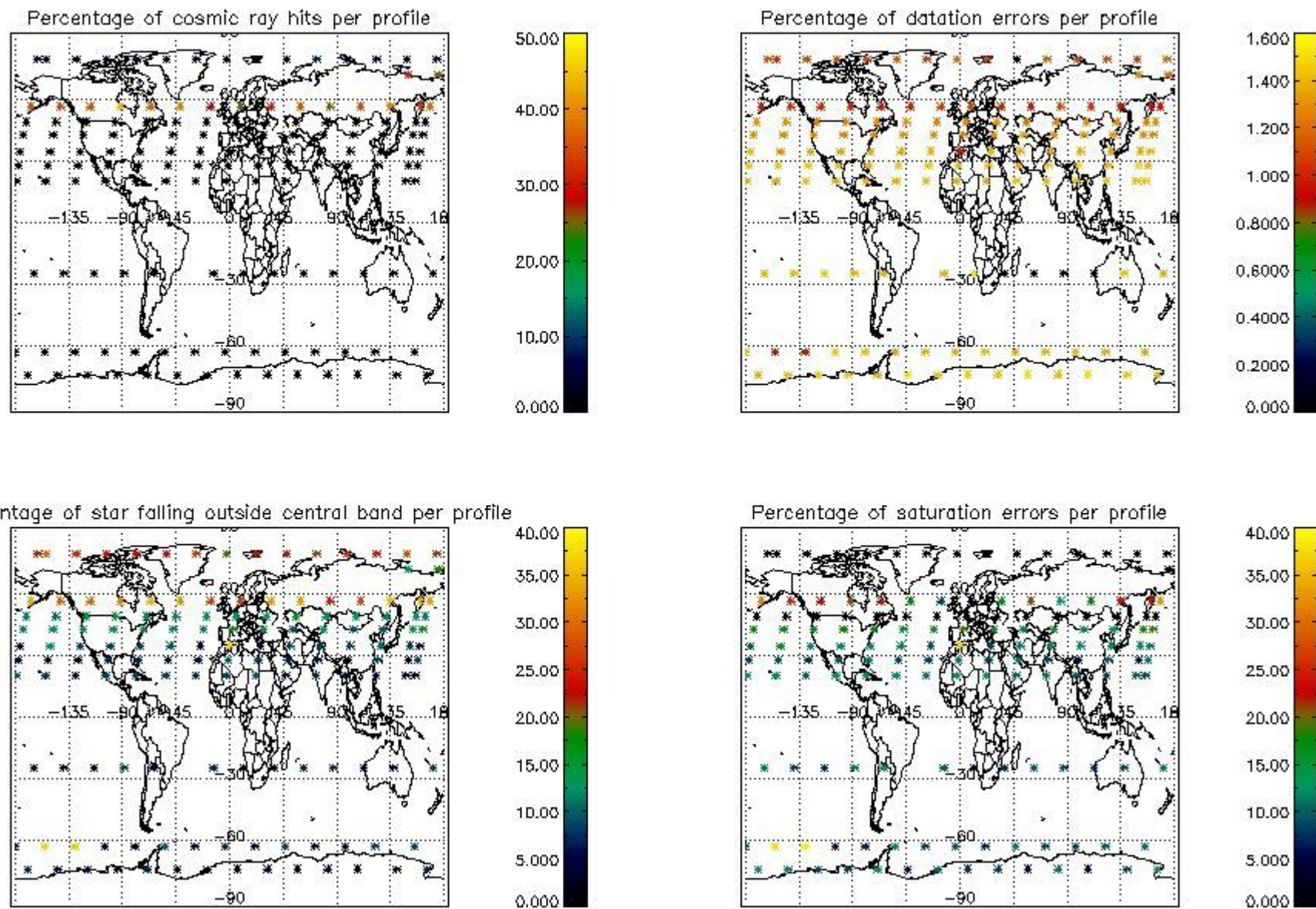


4.2 Plot quality information per product coming from level 1b processing (world map)

4.2.1 Plot level 1 quality information per product (world map): ENVISAT ASCENDING passes



4.2.2 Plot level 1 quality information per product (world map): ENVISAT DESCENDING passes



5. Trace gas profiles

5.1 Ozone statistics based on quality of products

The final quality of the products can be "measured" using the STD (Standard Deviation) attached to every point profile. This information is written to the parameter GOM_NL__2P/NL_LOCAL_SPECIES_DENSITY/o3_std of the level 2 products. The table below shows the statistics for given STD ranges.

The statistics are given with respect to the overall valid production:

- Products without fatal errors: GOM_NL__2P/MPH/PRODUCT_ERR=0
- Valid point profile: GOM_NL__2P/NL_LOCAL_SPECIES_DENSITY/pcd(0)=0

The 'Criteria' is applied to valid points of dark limb products:

- Products in dark limb illumination condition: GOM_NL__2P/NL_SUMMARY_QUALITY/obs_ill_cond=0
- Products without fatal errors: GOM_NL__2P/MPH/PRODUCT_ERR=0
- Valid point profile: GOM_NL__2P/NL_LOCAL_SPECIES_DENSITY/pcd(0)=0

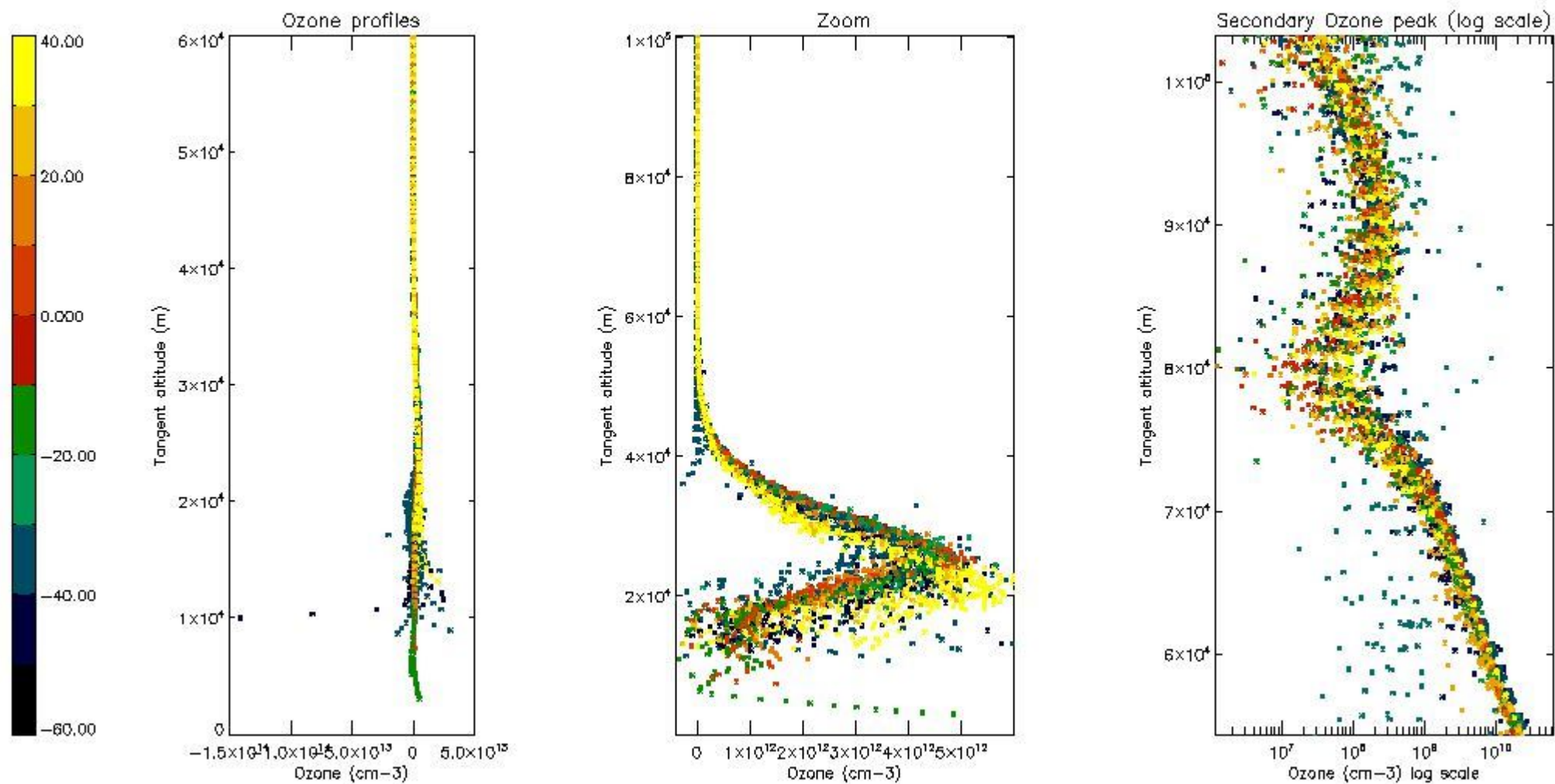
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	34
STD < 20	19

STD < 10	15
STD < 5	9

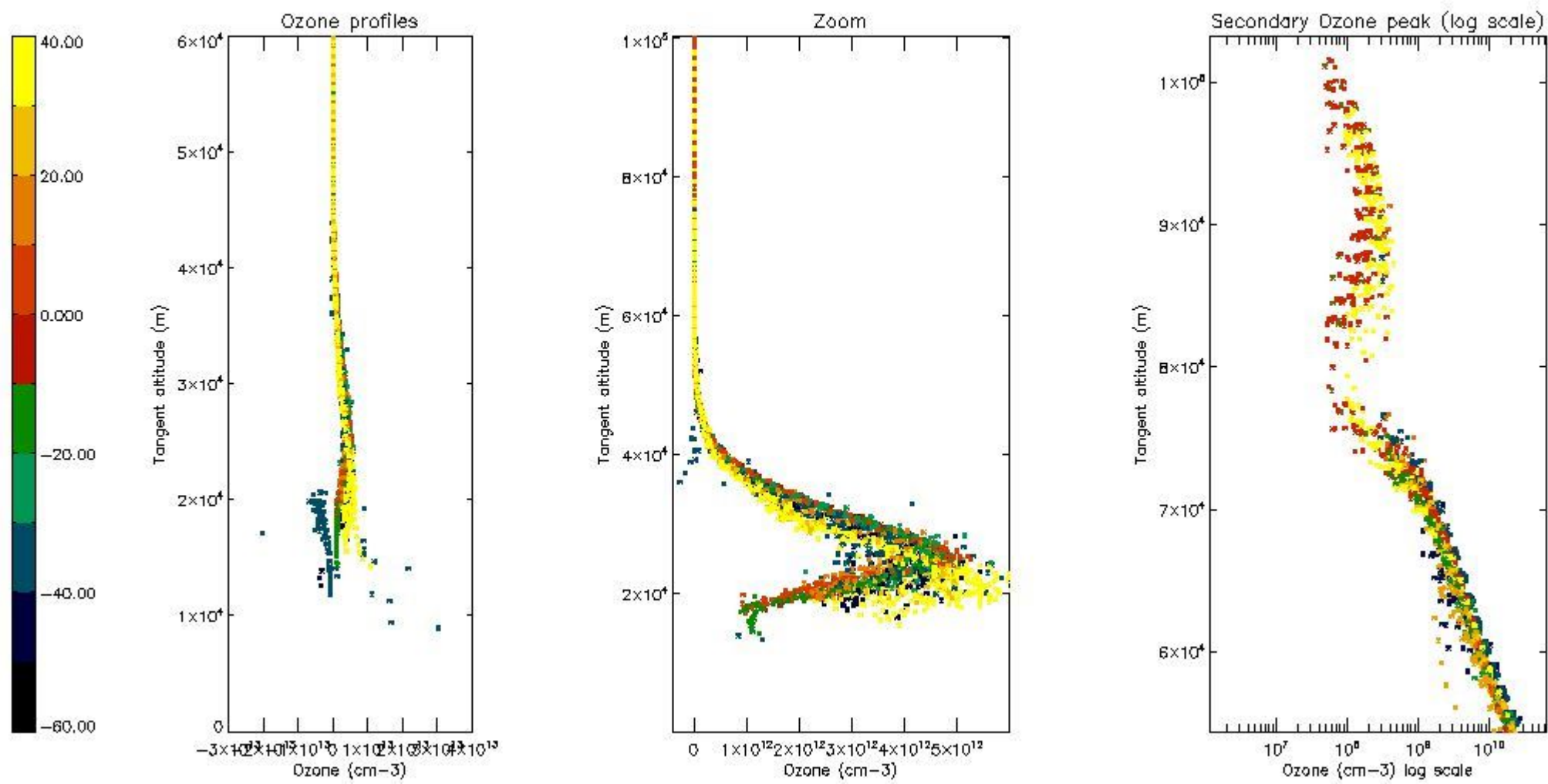
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



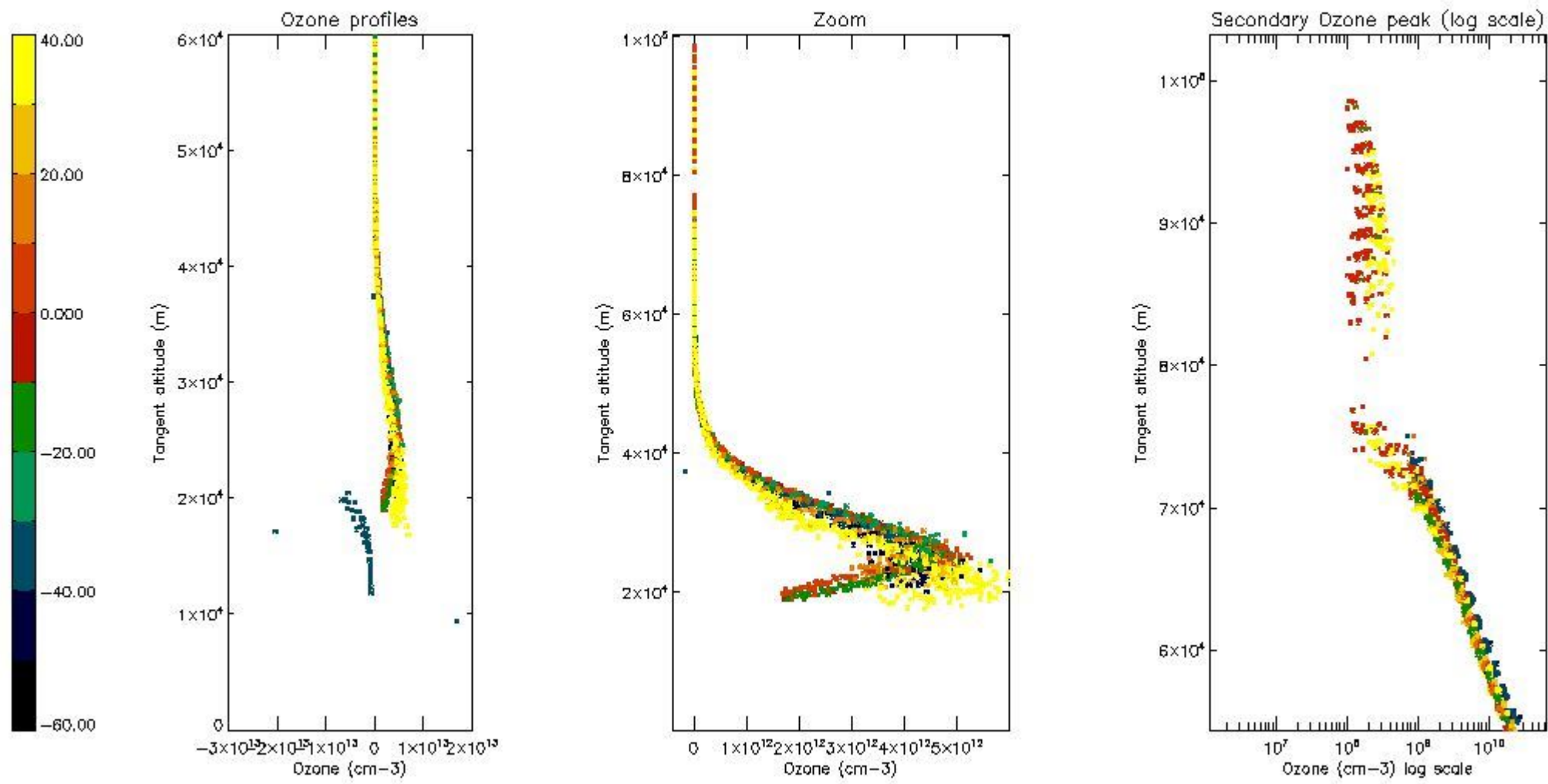
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



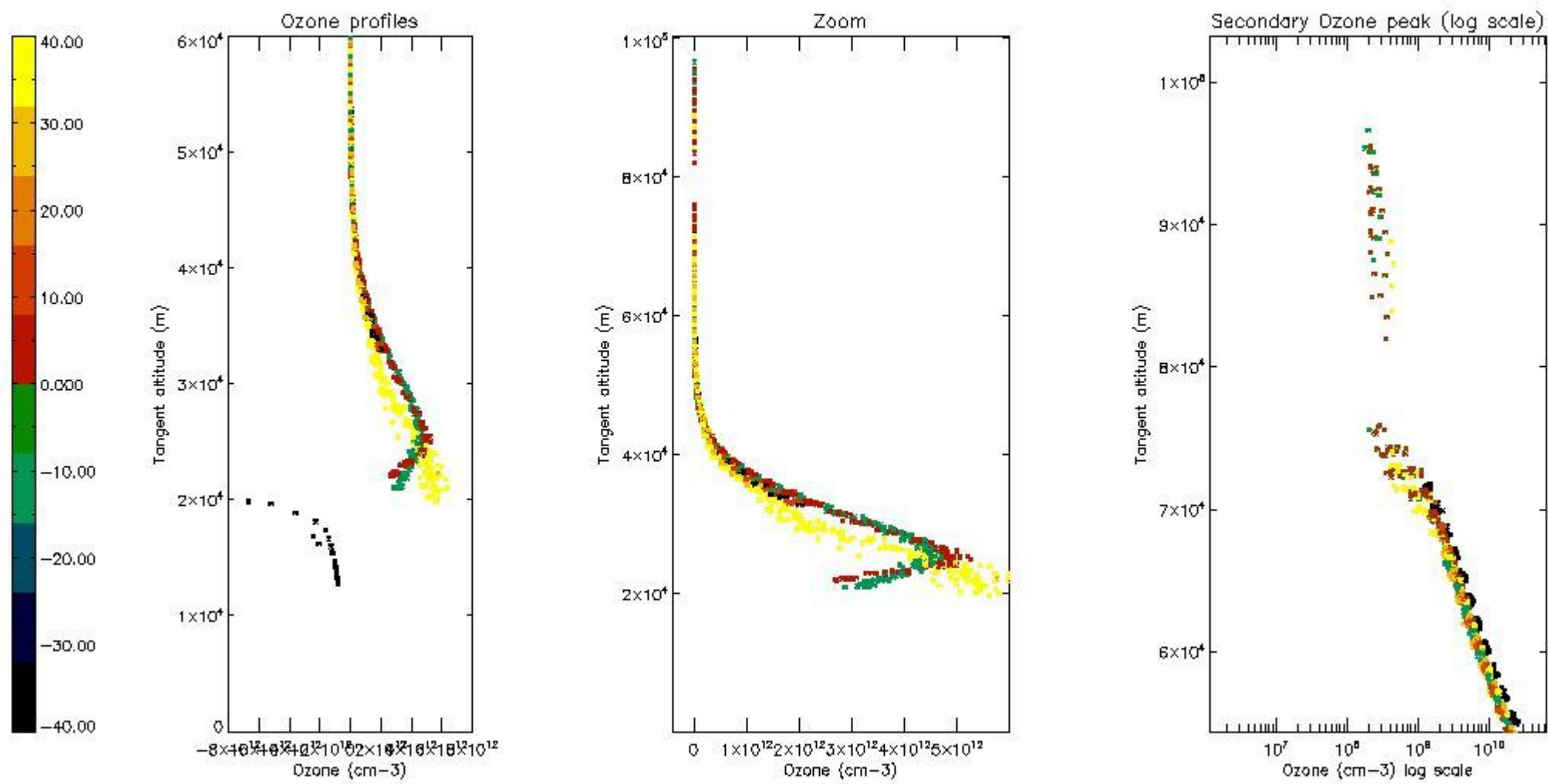
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



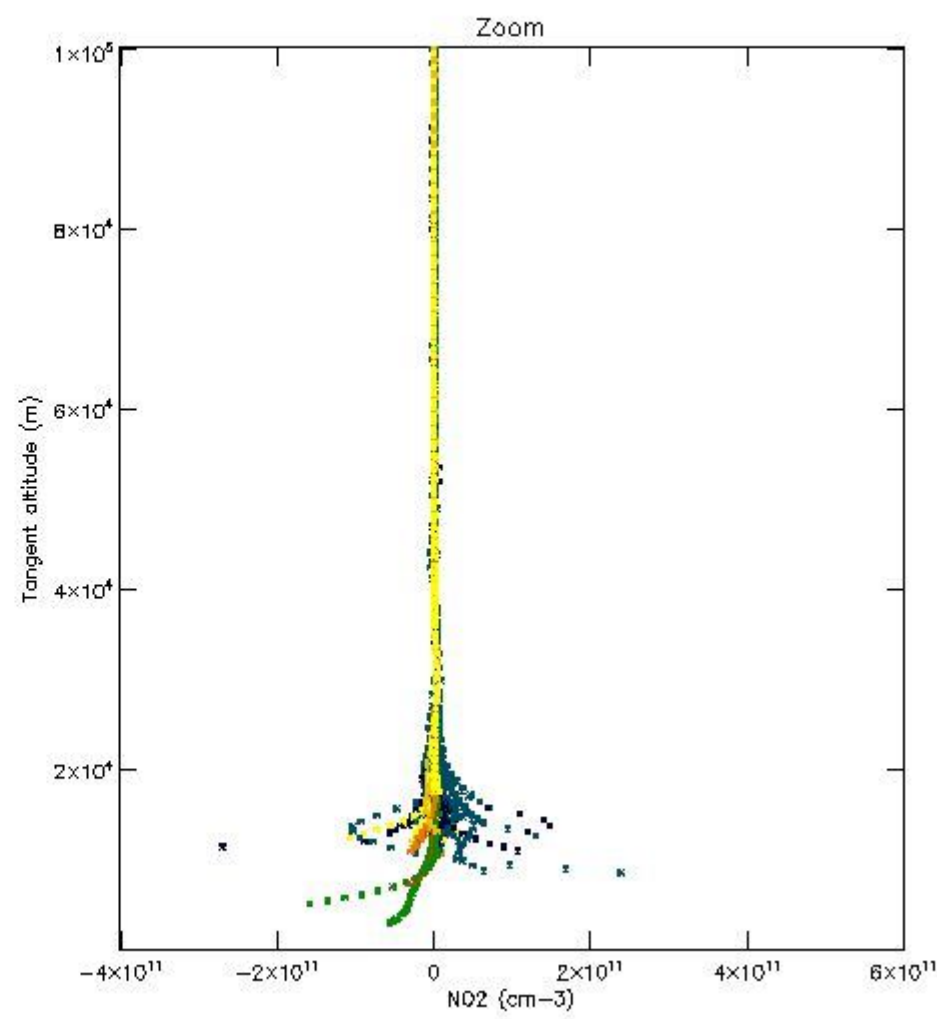
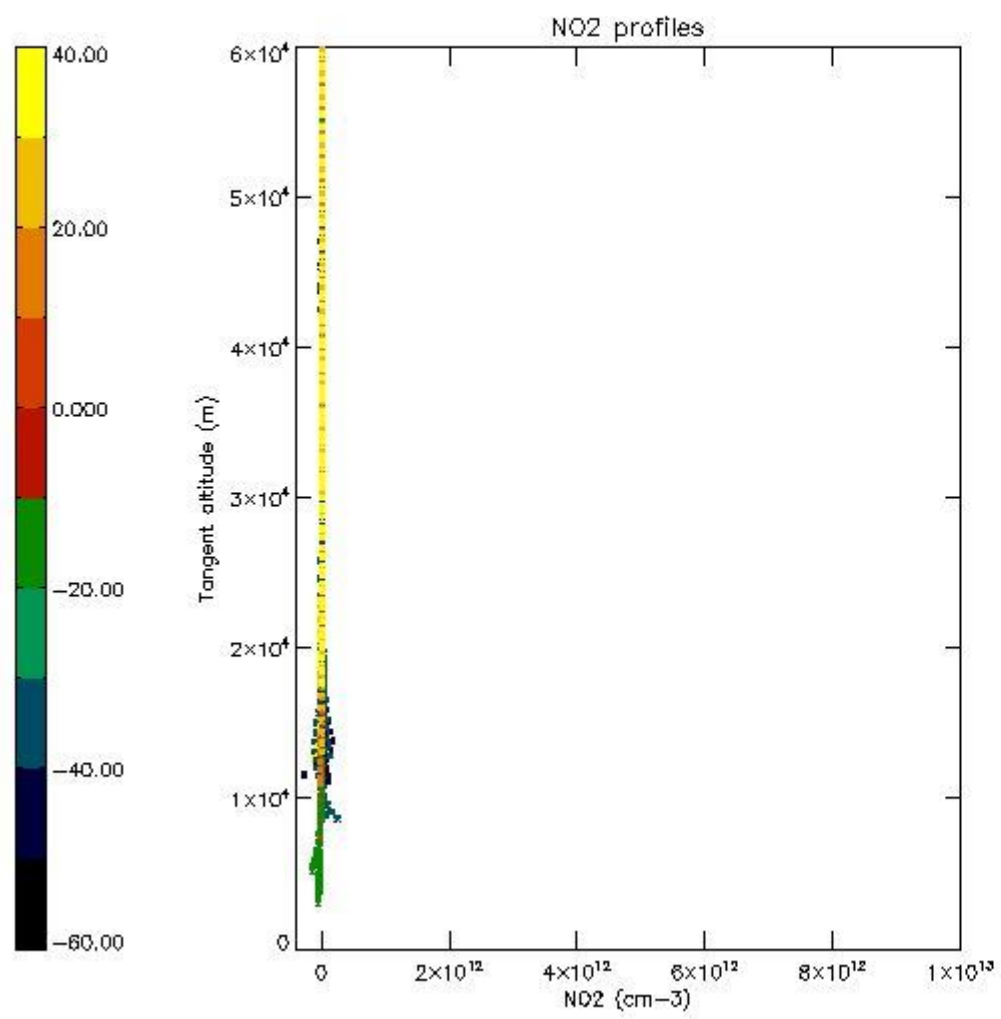
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



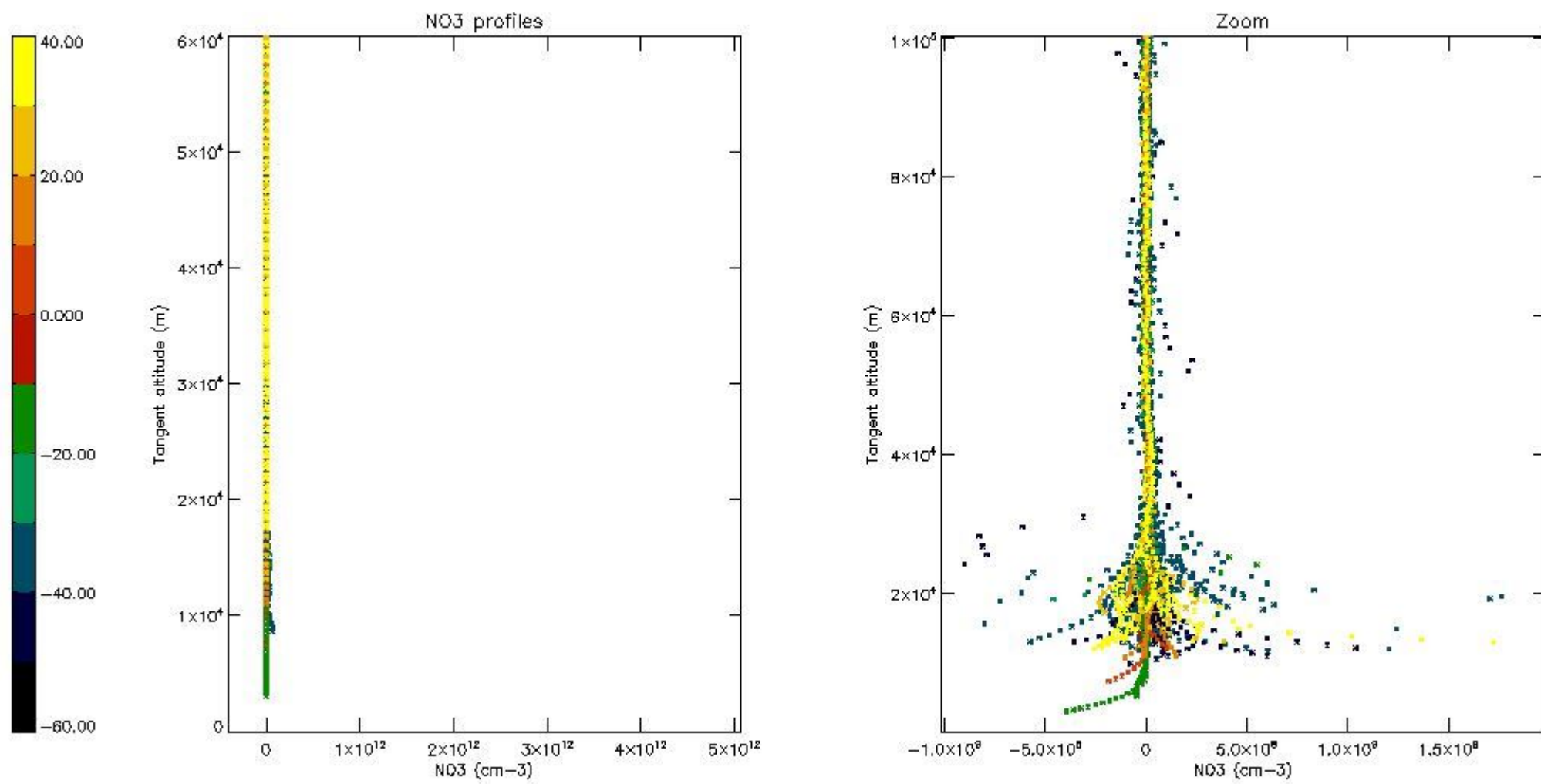
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



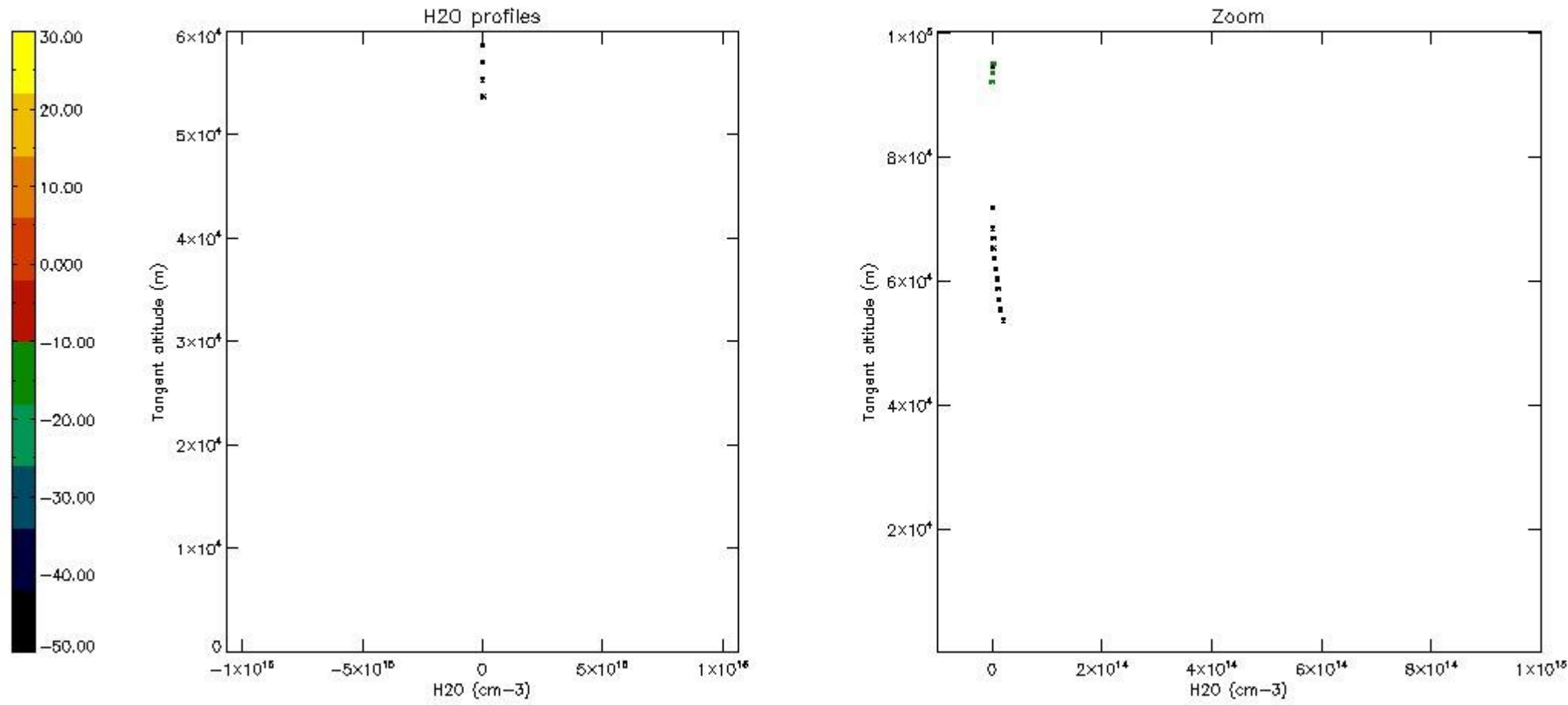
5.7 Plot NO3 profiles for all STD (dark without errors)

The colorbar represents the latitude.



5.8 Plot H2O profiles for all STD (only for occultations of stars 1,2,3,4,13,14,16,26,63 dark without errors)

The colorbar represents the latitude.



6. Auxiliary Data Files used for the production reported in section 2

The number reported in the third column indicates since which file (see list in section 2) the corresponding auxiliary file has been used. The fourth column is the date of those product files.

Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	24-JAN-2008 00:00:46
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	24-JAN-2008 00:00:46
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	24-JAN-2008 00:00:46

GOMOS Level 2 Daily Report

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[3.2 Plot of level 2 quality information per product \(world map\)](#)

[4. Level 1 Quality information per product \(stored on level 2 products\)](#)

[4.1 Plot of level 1 quality information per product \(time dependant\)](#)

[4.1.1 Plot of level 1 quality information per product \(time dependant\): ASCENDING](#)

[4.1.2 Plot of level 1 quality information per product \(time dependant\): DESCENDING](#)

[4.2 Plot of level 1 quality information per product \(world map\)](#)

[4.2.1 Plot of level 1 quality information per product \(world map\): ASCENDING](#)

[4.2.2 Plot of level 1 quality information per product \(world map\): DESCENDING](#)

[5. Ozone profiles based on quality statistics and other trace gas profiles](#)

[5.1 Ozone statistics based on quality of products](#)

[5.2 Plot ozone profiles for all STD \(dark without errors\)](#)

[5.3 Plot ozone profiles where STD < 20% \(dark without errors\)](#)

[5.4. Plot ozone profiles where STD < 10% \(dark without errors\)](#)

[5.5. Plot ozone profiles where STD < 5% \(dark without errors\)](#)

[5.6 Plot NO2 profiles for all STD \(dark without errors\)](#)

[5.7 Plot NO3 profiles for all STD \(dark without errors\)](#)

[5.8 Plot H2O profiles \(only for occultations of stars 1,2,3,4,13,14,16,26,63 dark without errors\) for all STD](#)

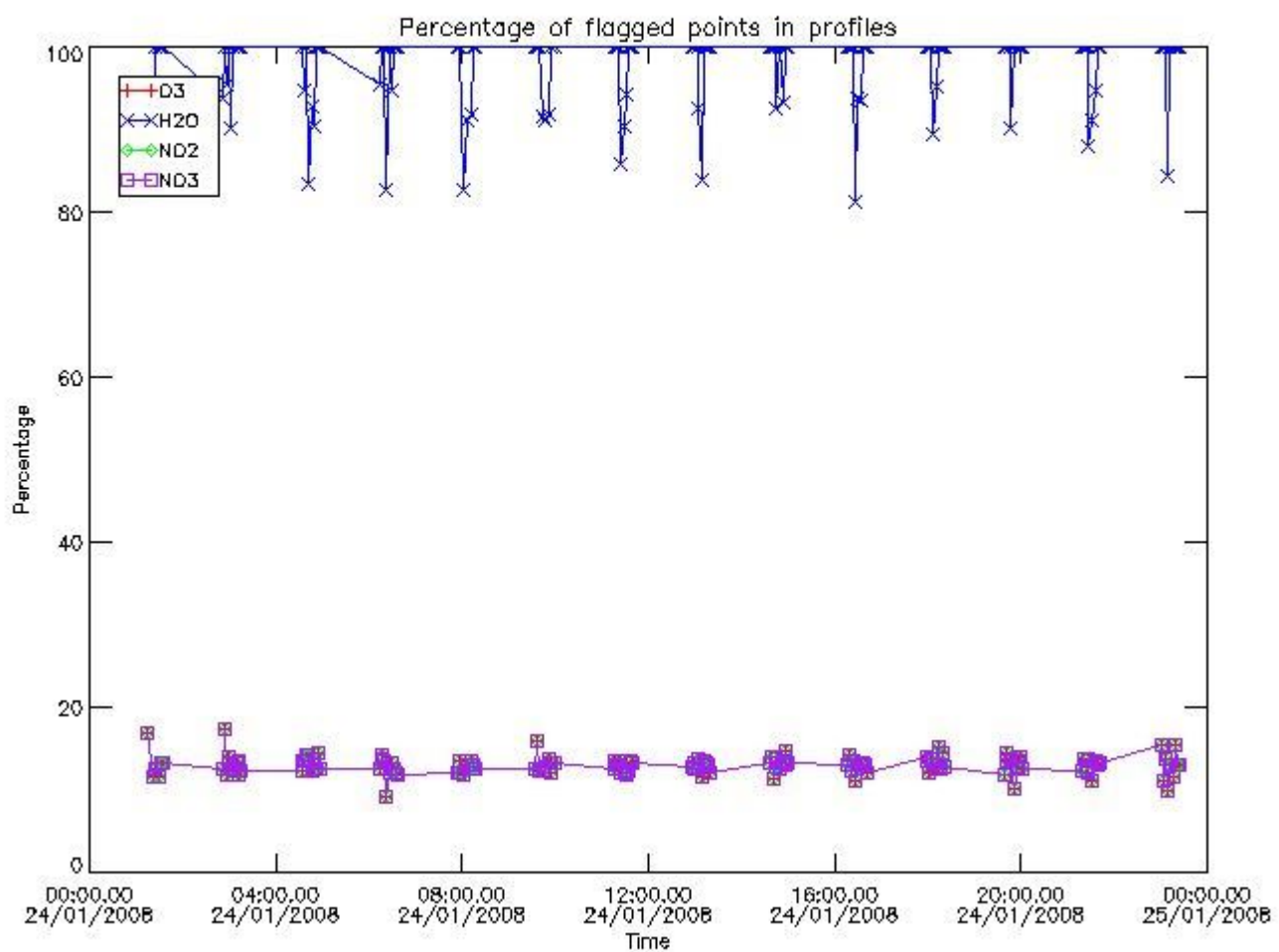
[6. Auxiliary Data Files used for the production reported in section 2](#)

397	GOM_NL__2PRFIN20080124_232031_000000402065_00245_30860_0548.N1	24-JAN-2008 23:20:31	Dark	39.500	46	Del Vel	1.9540	10600.	79	30860	No
398	GOM_NL__2PRFIN20080124_232307_000000392065_00245_30860_0549.N1	24-JAN-2008 23:23:07	Dark	39.000	34	Gam2Vel	1.7930	23000.	78	30860	No
399	GOM_NL__2PRFIN20080124_232514_000000402065_00245_30860_0550.N1	24-JAN-2008 23:25:14	Straylight	40.000	70	Zet Pup	2.2460	39000.	80	30860	No
400	GOM_NL__2PRFIN20080124_232643_000000402065_00245_30860_0551.N1	24-JAN-2008 23:26:43	Straylight	40.000	117	Pi Pup	2.7060	3800.0	80	30860	No
401	GOM_NL__2PRFIN20080124_232912_000000432065_00245_30860_0552.N1	24-JAN-2008 23:29:12	Straylight	42.500	23	21Eps CMa	1.5020	26000.	85	30860	No
402	GOM_NL__2PRFIN20080124_233035_000000392065_00245_30860_0553.N1	24-JAN-2008 23:30:35	Straylight	39.000	179	24Omi2CMa	3.0320	24000.	78	30860	No
403	GOM_NL__2PRFIN20080124_233245_000000492065_00245_30860_0554.N1	24-JAN-2008 23:32:45	Straylight	49.000	1	9Alp CMa	-1.4400	11000.	98	30860	No
404	GOM_NL__2PRFIN20080124_233956_000000522065_00245_30860_0555.N1	24-JAN-2008 23:39:56	Bright	52.000	14	58Alp Ori	0.87000	3000.0	104	30860	No
405	GOM_NL__2PRFIN20080124_234205_000000392065_00245_30860_0556.N1	24-JAN-2008 23:42:05	Bright	38.500	44	24Gam Gem	1.9280	11000.	77	30860	No
406	GOM_NL__2PRFIN20080124_234351_000000402065_00245_30860_0557.N1	24-JAN-2008 23:43:51	Bright	39.500	151	13Mu Gem	2.8900	3000.0	79	30860	No
407	GOM_NL__2PRFIN20080124_234609_000000362065_00245_30860_0558.N1	24-JAN-2008 23:46:09	Bright	36.000	28	12Bet Tau	1.6500	15200.	72	30860	No
408	GOM_NL__2PRFIN20080124_234805_000000362065_00245_30860_0559.N1	24-JAN-2008 23:48:05	Bright	35.500	107	37The Aur	2.6490	11000.	71	30860	No
409	GOM_NL__2PRFIN20080124_235013_000000352065_00245_30860_0560.N1	24-JAN-2008 23:50:13	Bright	34.500	42	34Bet Aur	1.9000	10200.	69	30860	No

3. Quality information per product

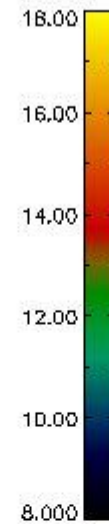
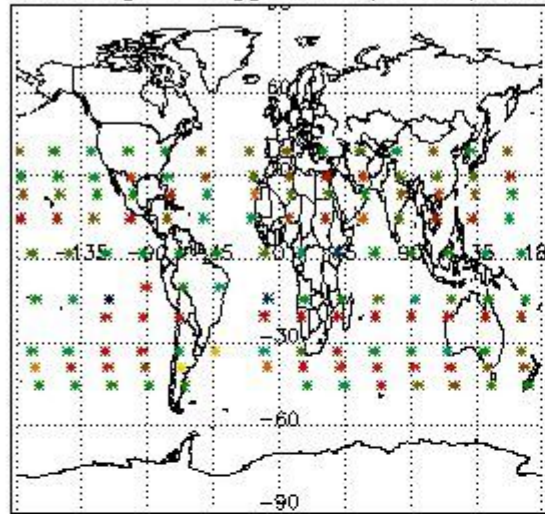
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

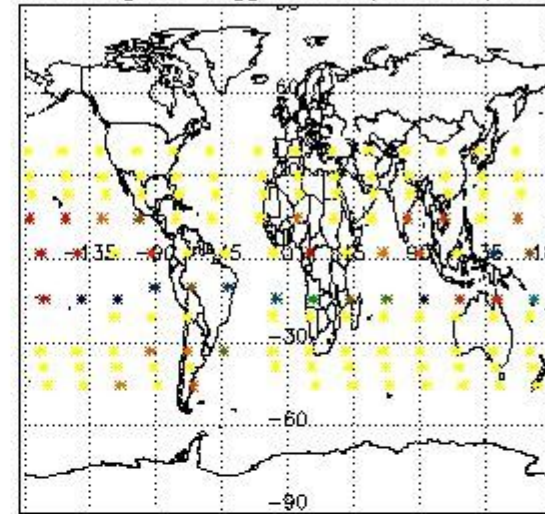


3.2 Plot quality information per product (world map)

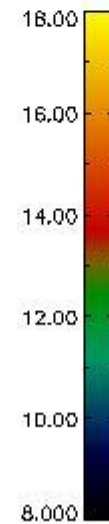
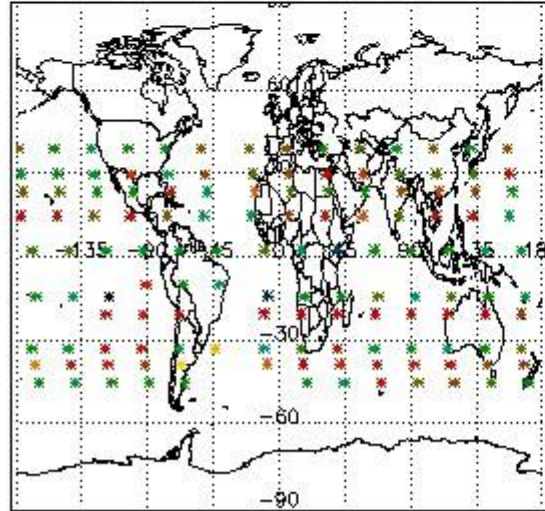
Percentage of flagged data per O3 profile



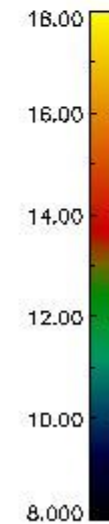
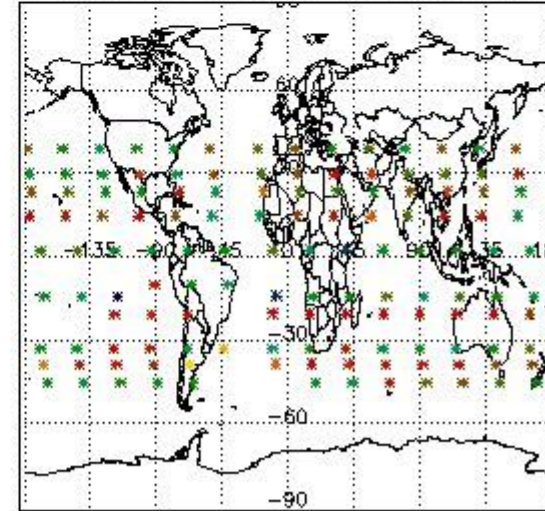
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

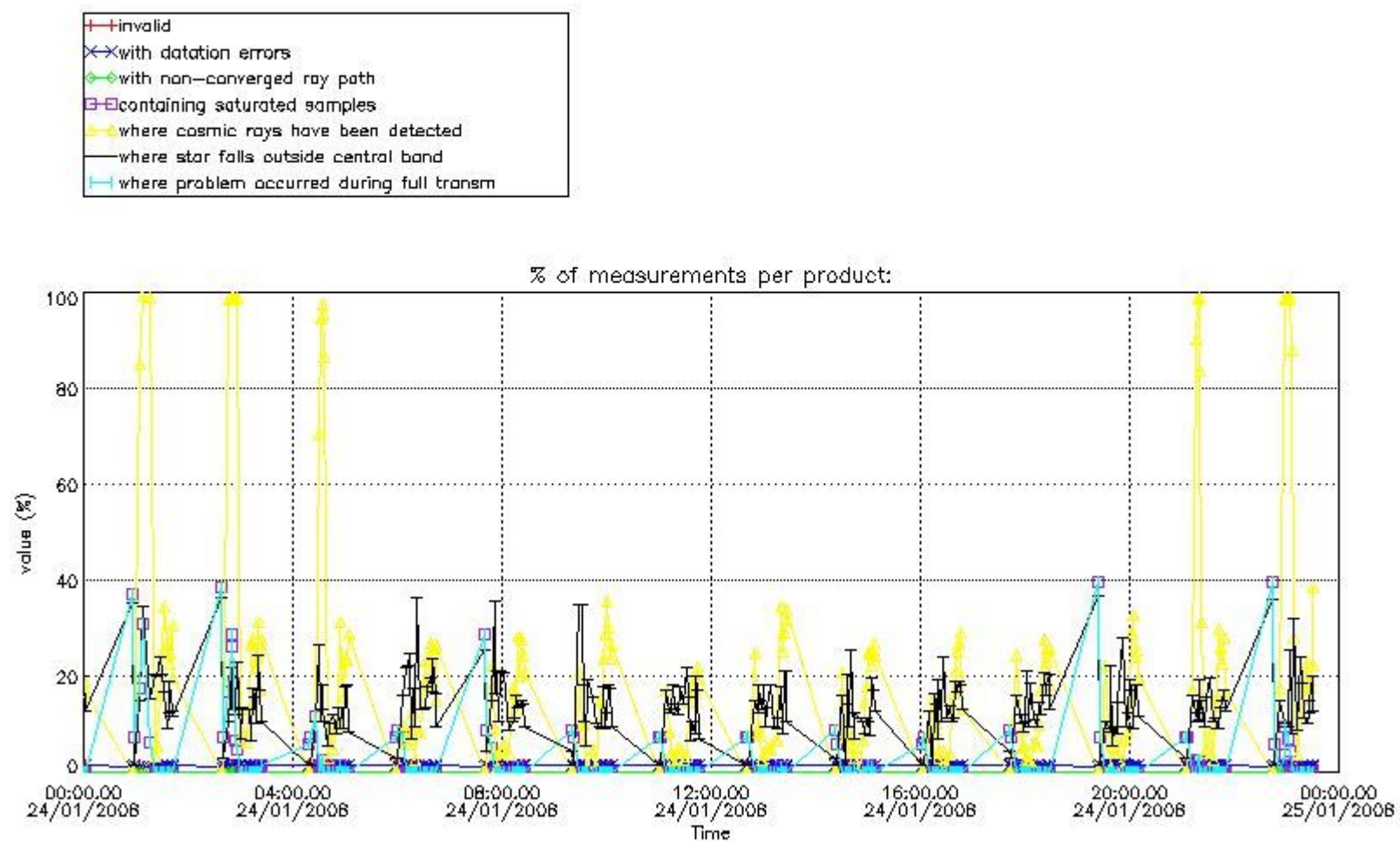


4. Level 1 quality information per product

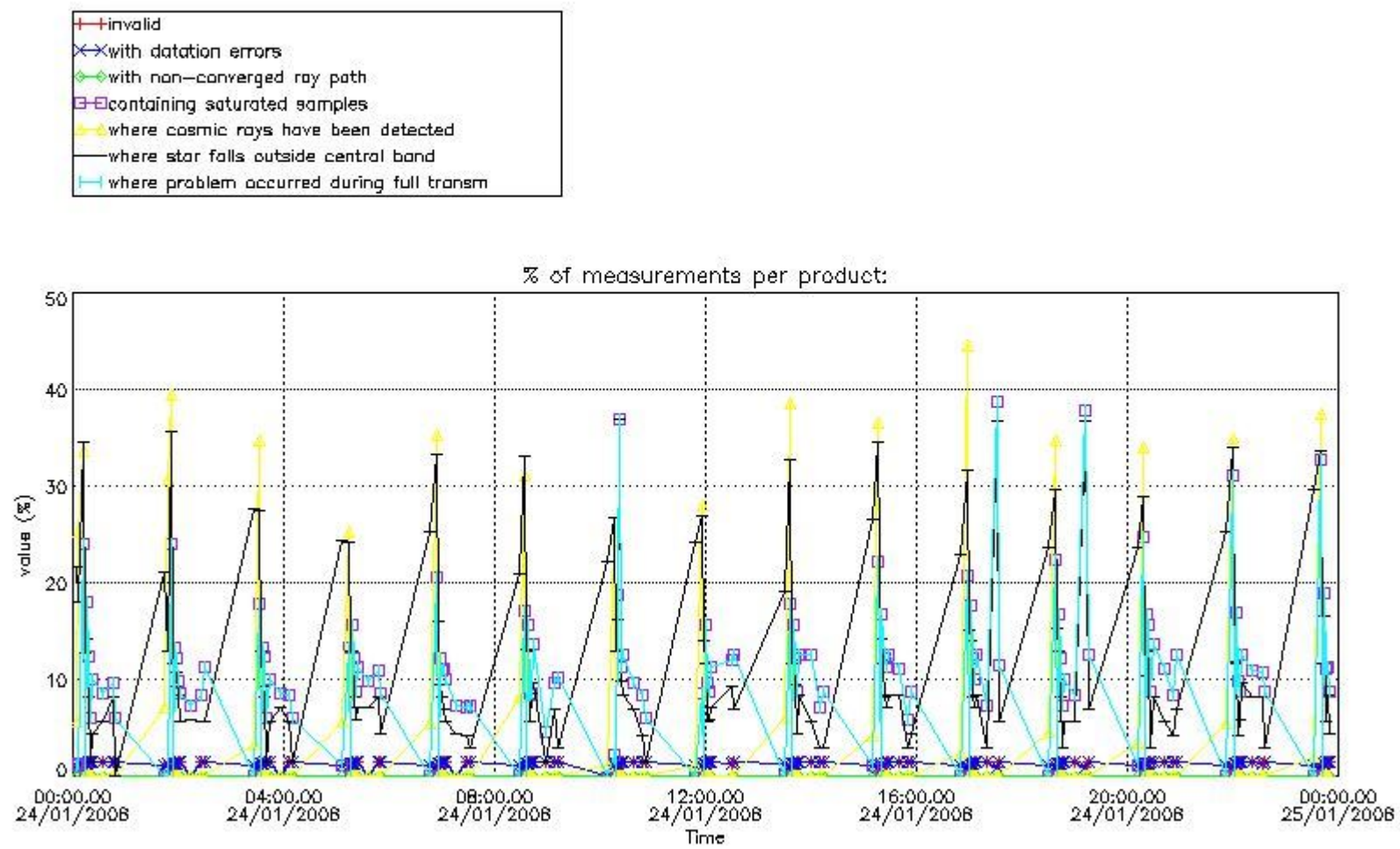
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

4.1 Plot quality information per product (time dependant) coming from level 1b processing

4.1.1 Plot level 1 quality information per product (time dependant): ENVISAT ASCENDING passes

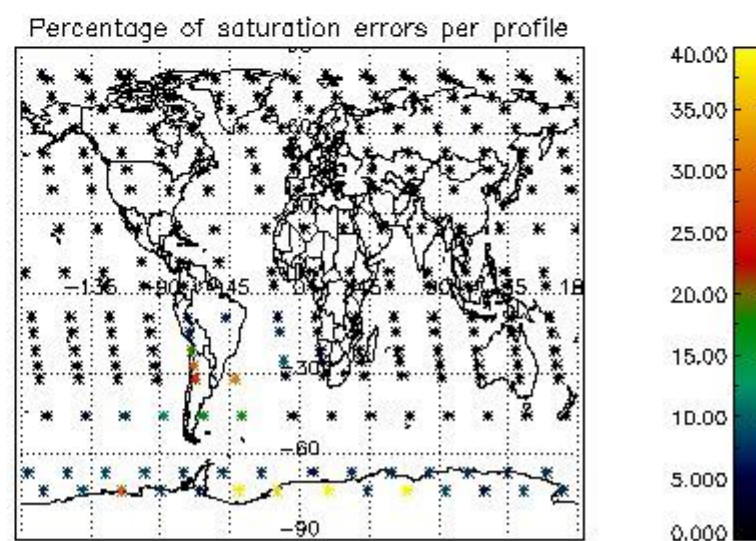
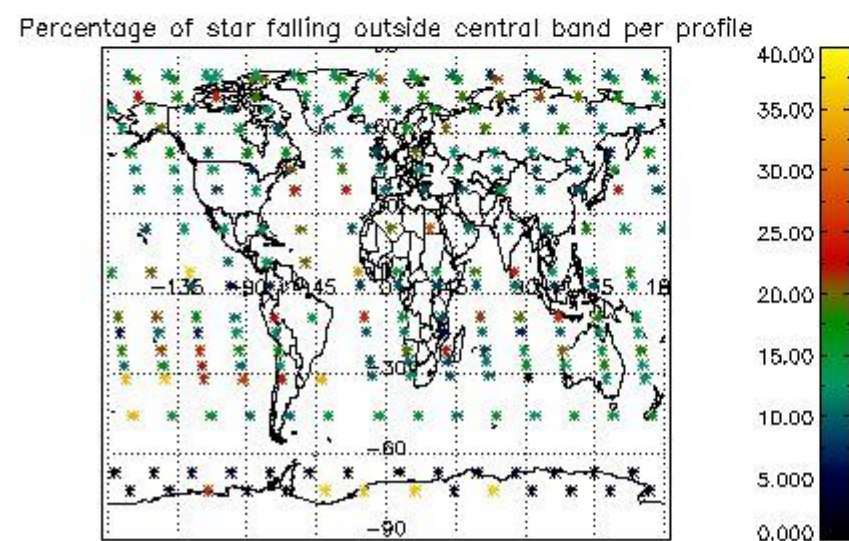
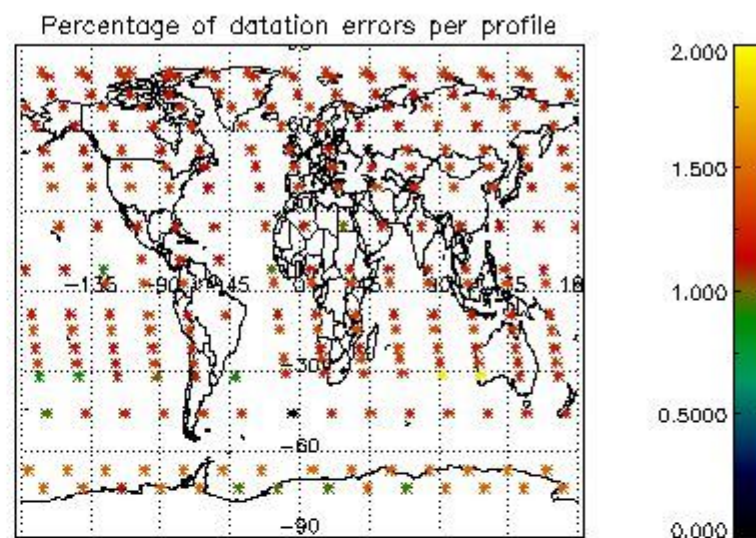
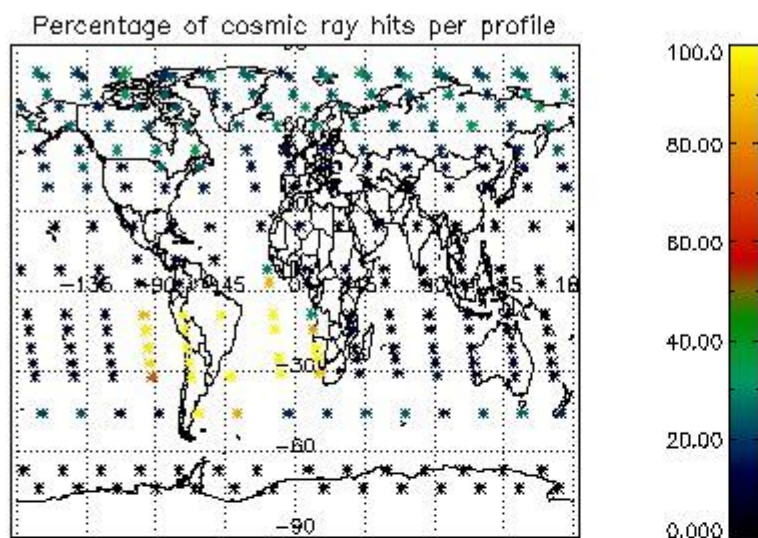


4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes

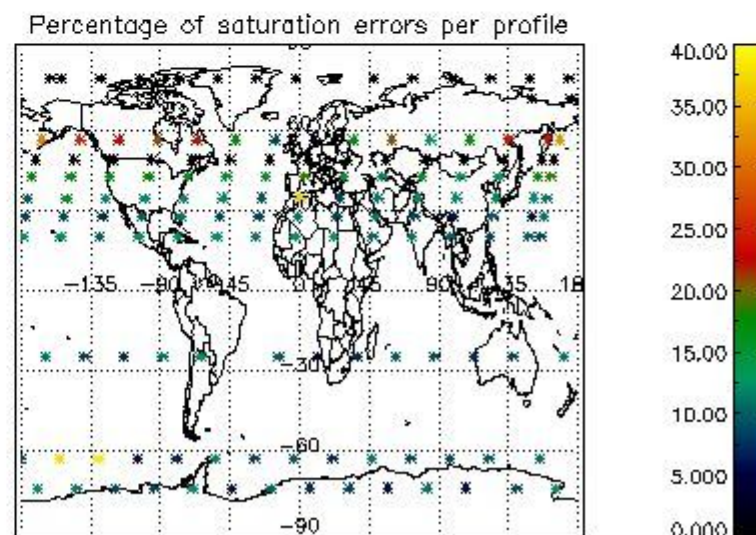
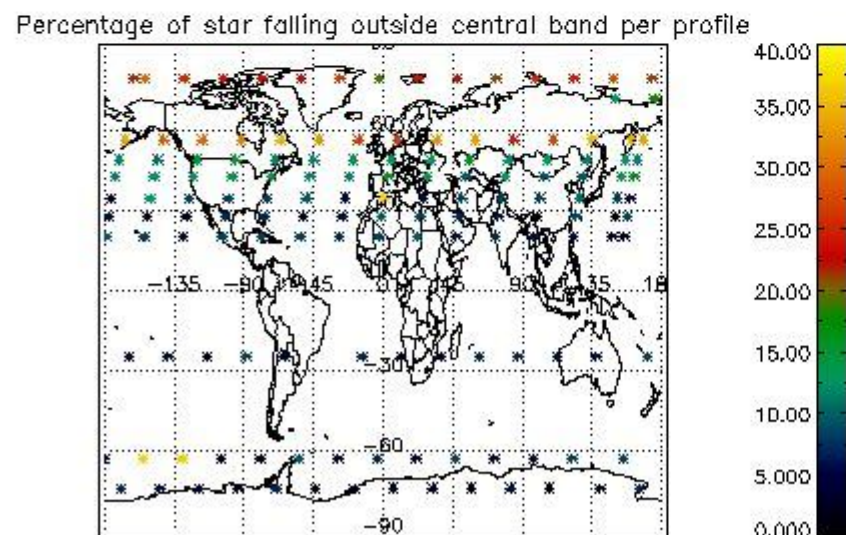
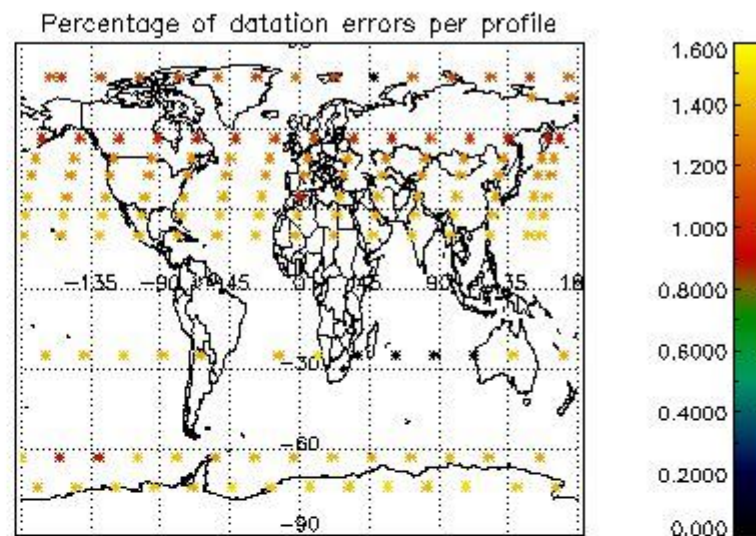
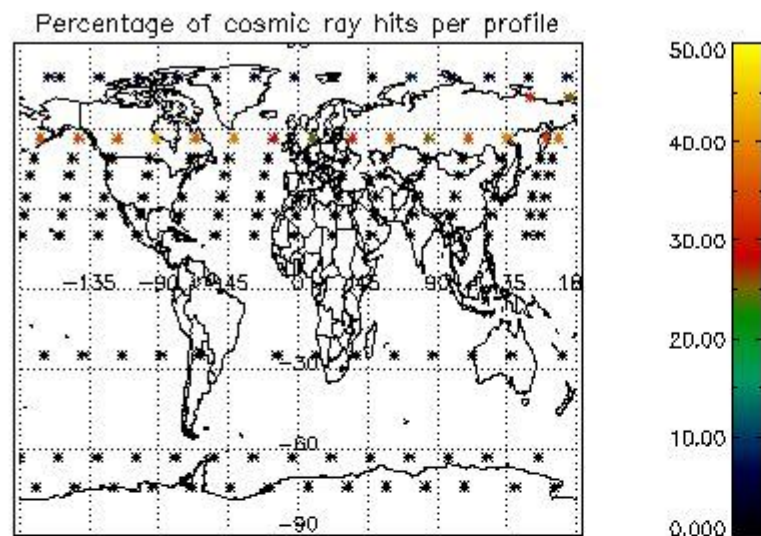


4.2 Plot quality information per product coming from level 1b processing (world map)

4.2.1 Plot level 1 quality information per product (world map): ENVISAT ASCENDING passes



4.2.2 Plot level 1 quality information per product (world map): ENVISAT DESCENDING passes



5. Trace gas profiles

5.1 Ozone statistics based on quality of products

The final quality of the products can be "measured" using the STD (Standard Deviation) attached to every point profile. This information is written to the parameter GOM_NL__2P/NL_LOCAL_SPECIES_DENSITY/o3_std of the level 2 products. The table below shows the statistics for given STD ranges.

The statistics are given with respect to the overall valid production:

- Products without fatal errors: GOM_NL__2P/MPH/PRODUCT_ERR=0
- Valid point profile: GOM_NL__2P/NL_LOCAL_SPECIES_DENSITY/pcd(0)=0

The 'Criteria' is applied to valid points of dark limb products:

- Products in dark limb illumination condition: GOM_NL__2P/NL_SUMMARY_QUALITY/obs_ill_cond=0
- Products without fatal errors: GOM_NL__2P/MPH/PRODUCT_ERR=0
- Valid point profile: GOM_NL__2P/NL_LOCAL_SPECIES_DENSITY/pcd(0)=0

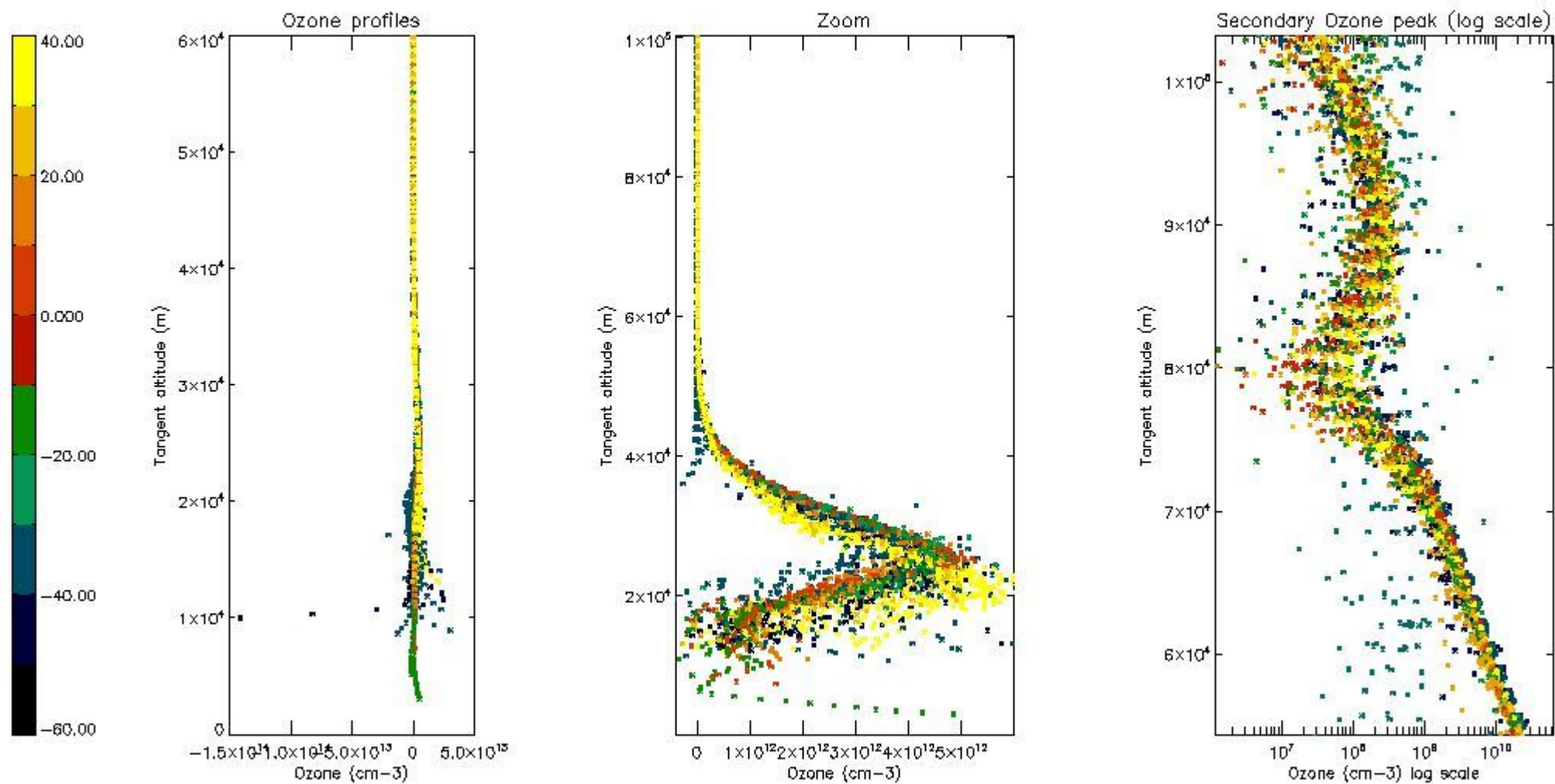
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	34
STD < 20	19

STD < 10	15
STD < 5	9

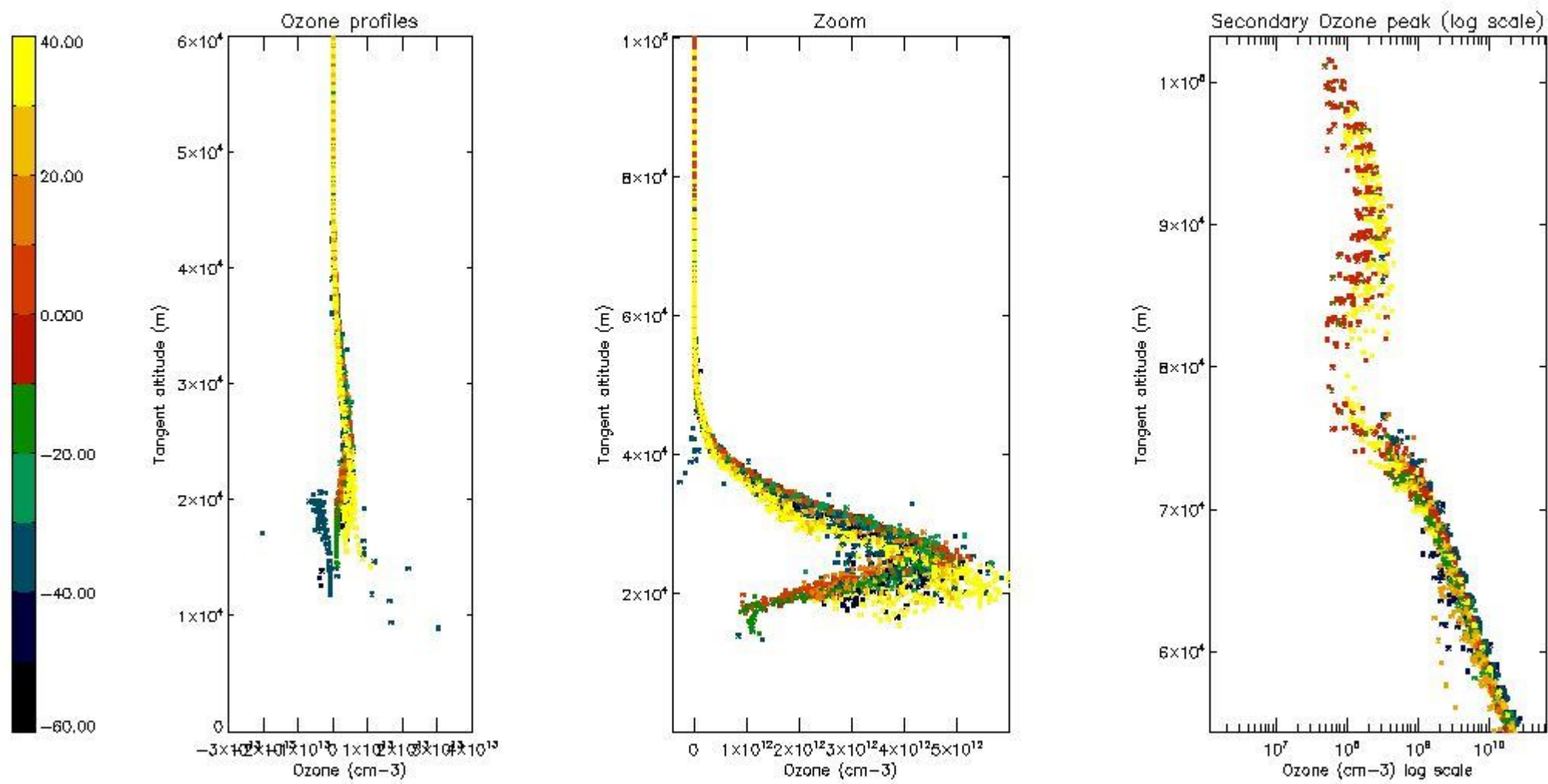
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



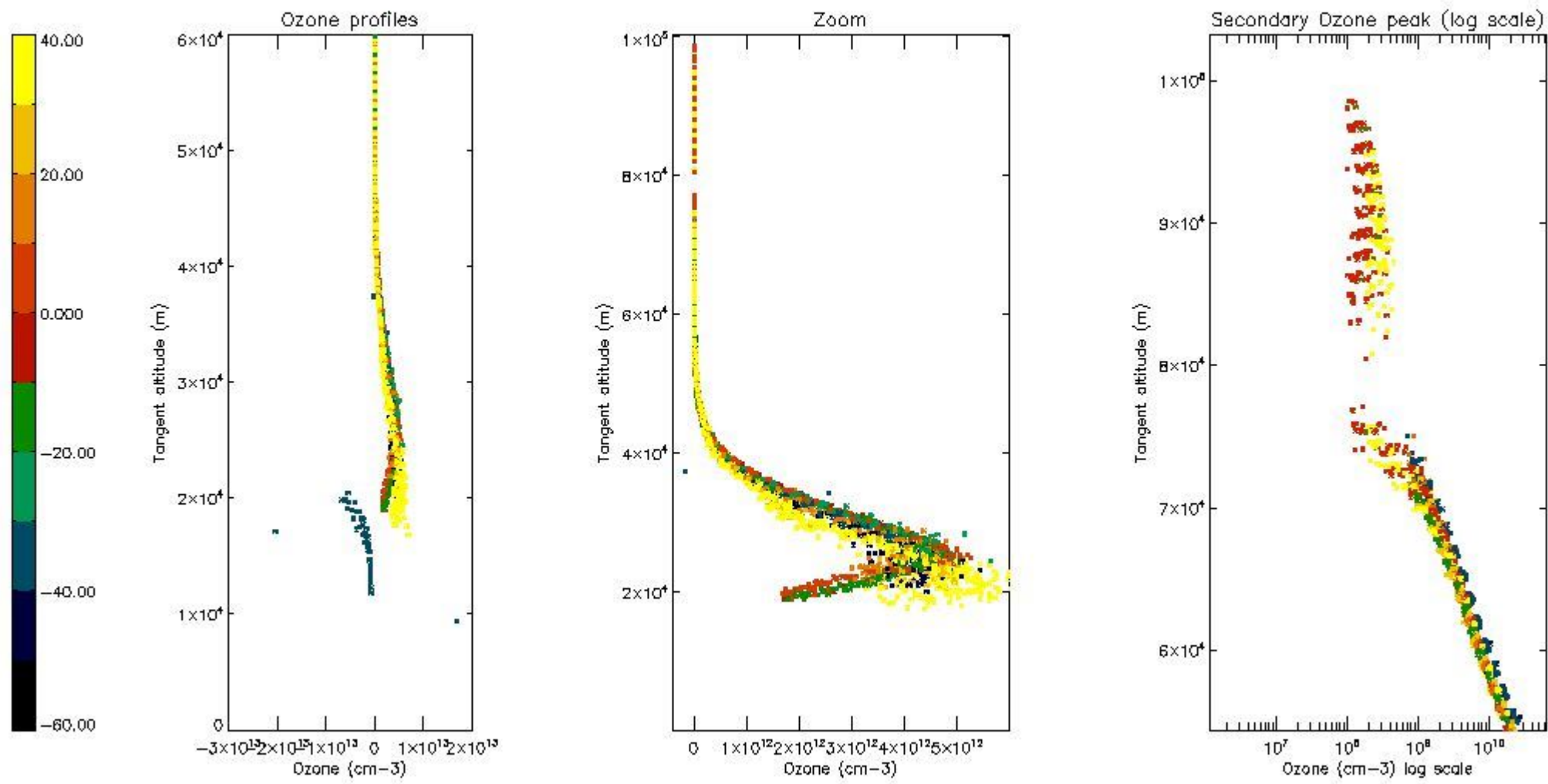
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



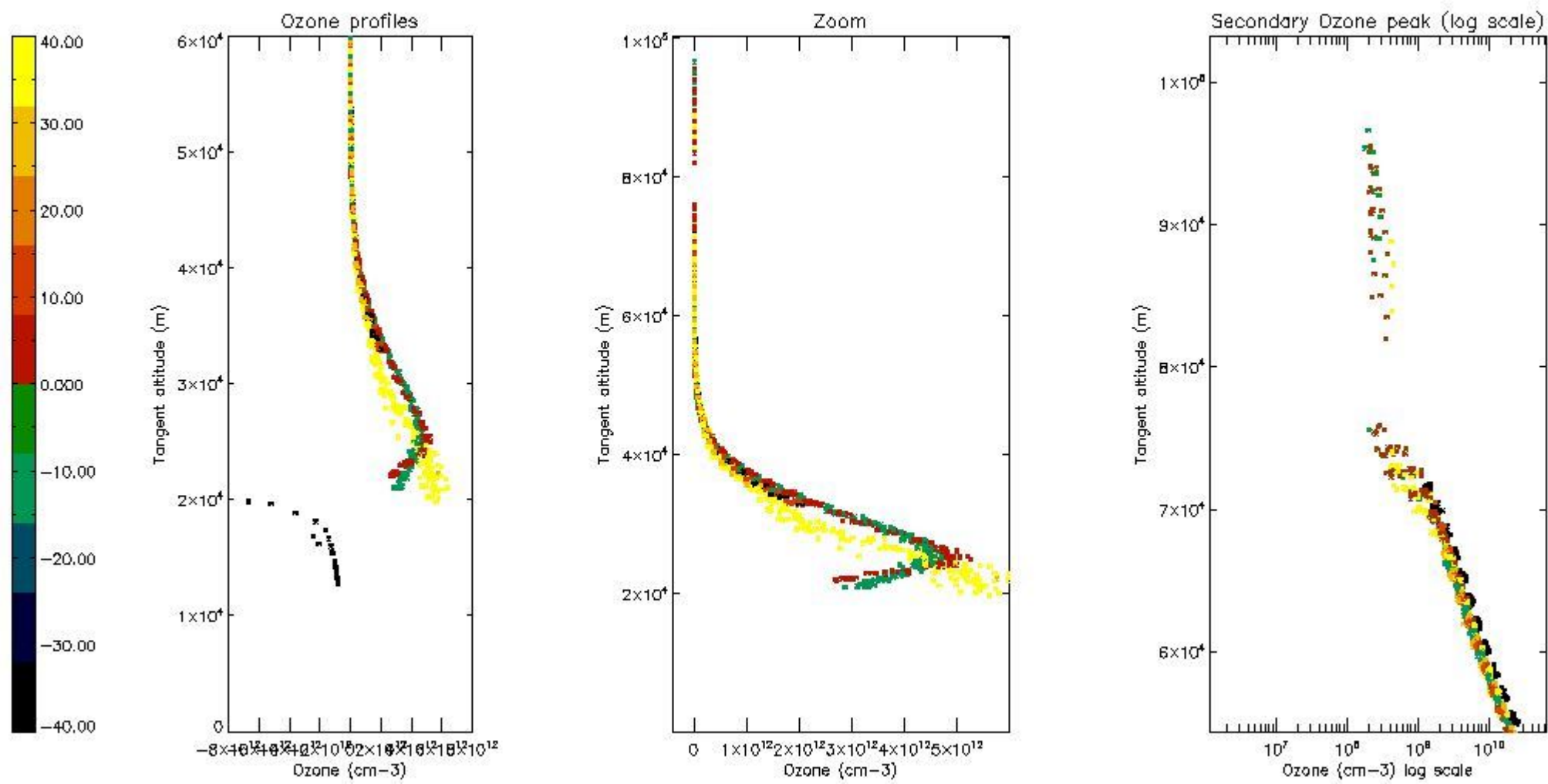
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



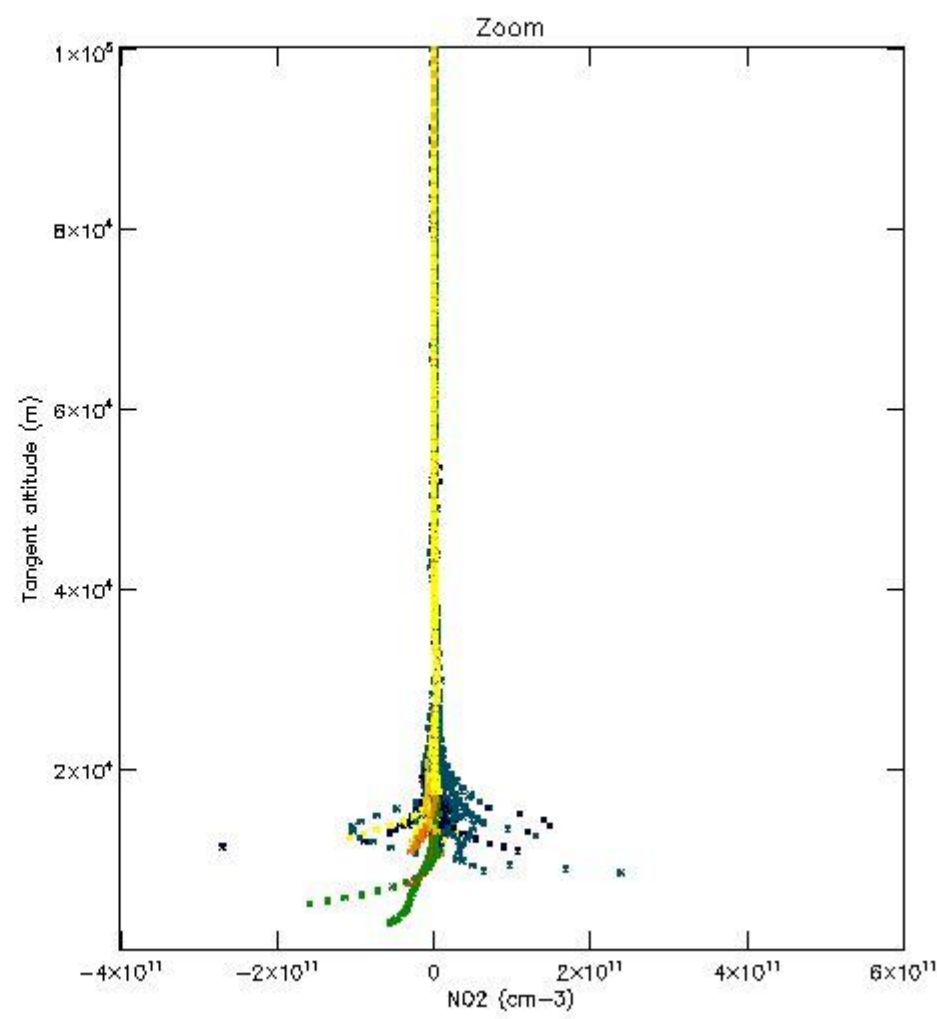
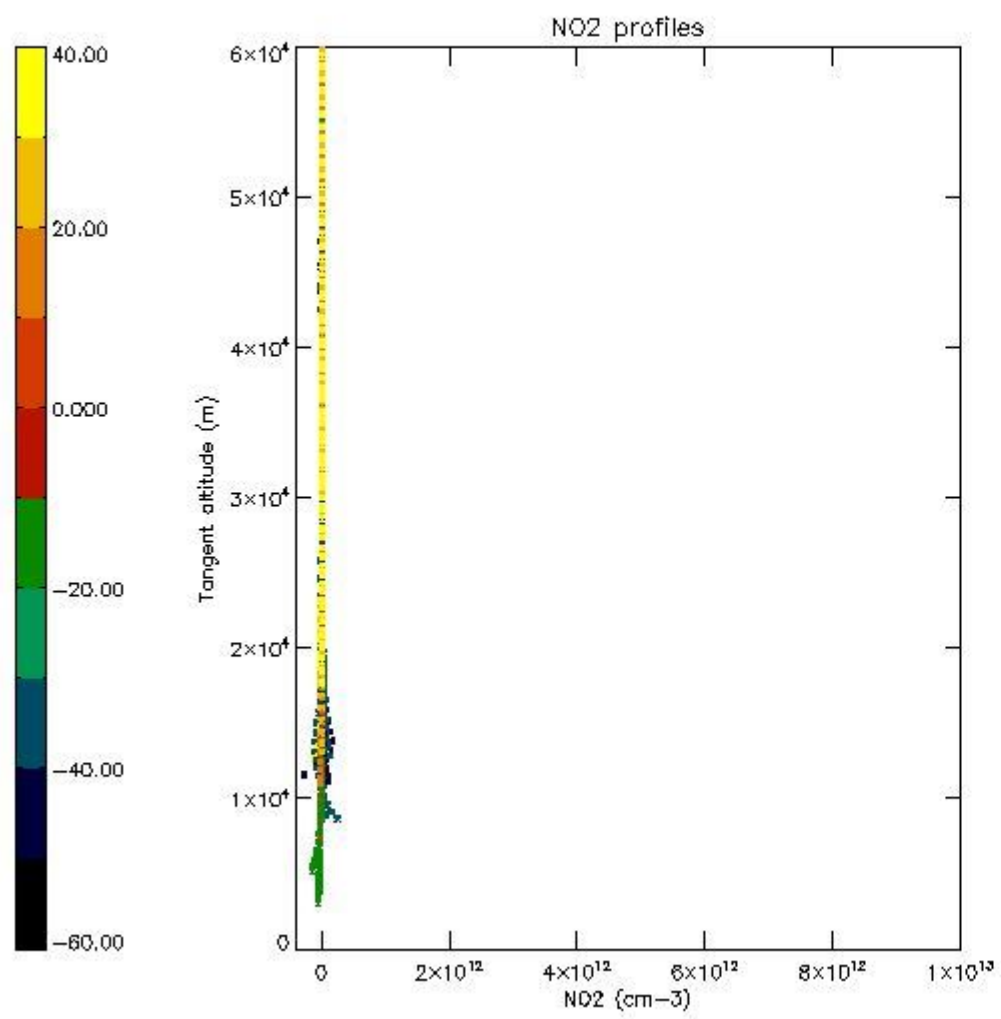
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



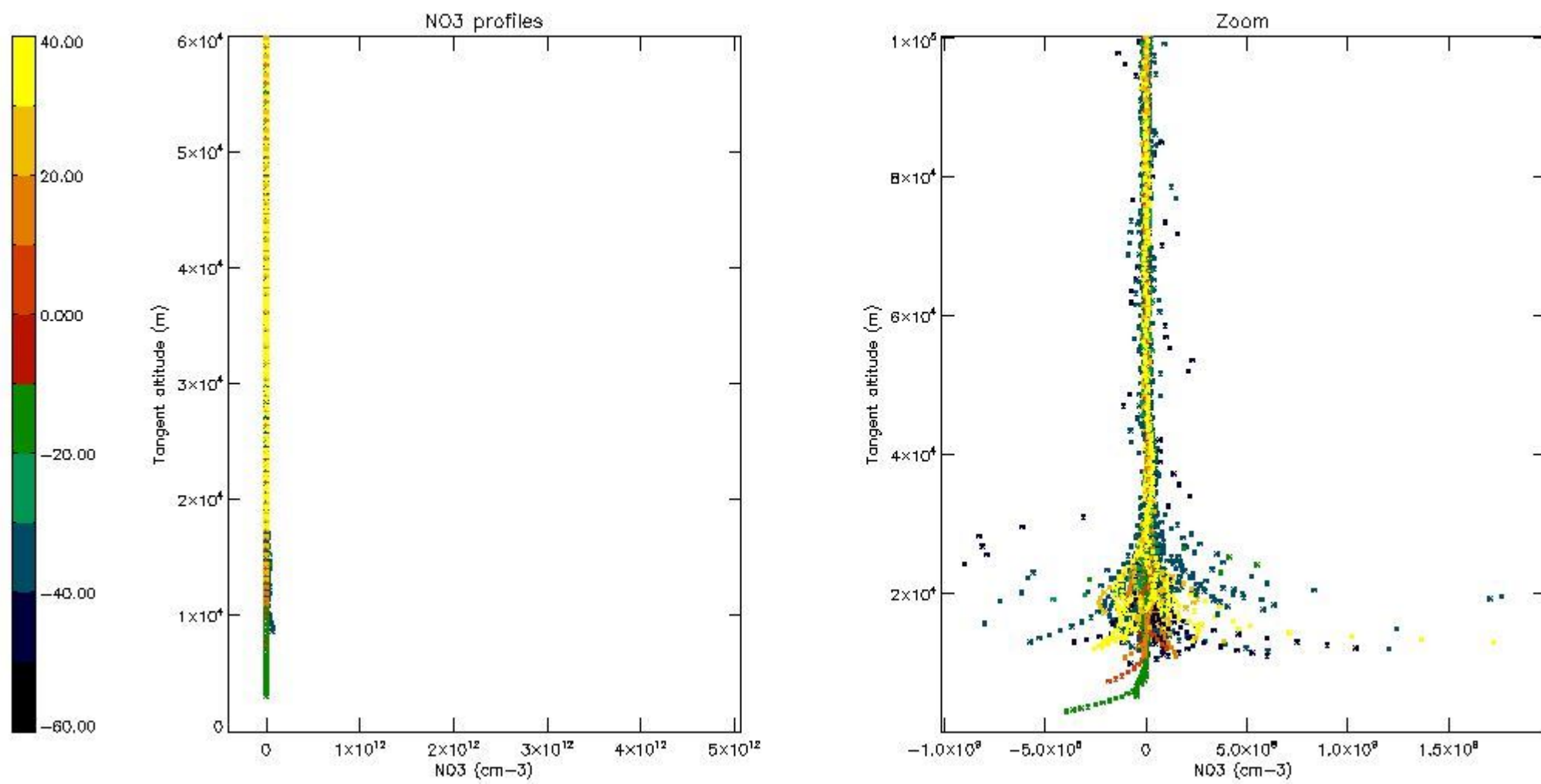
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



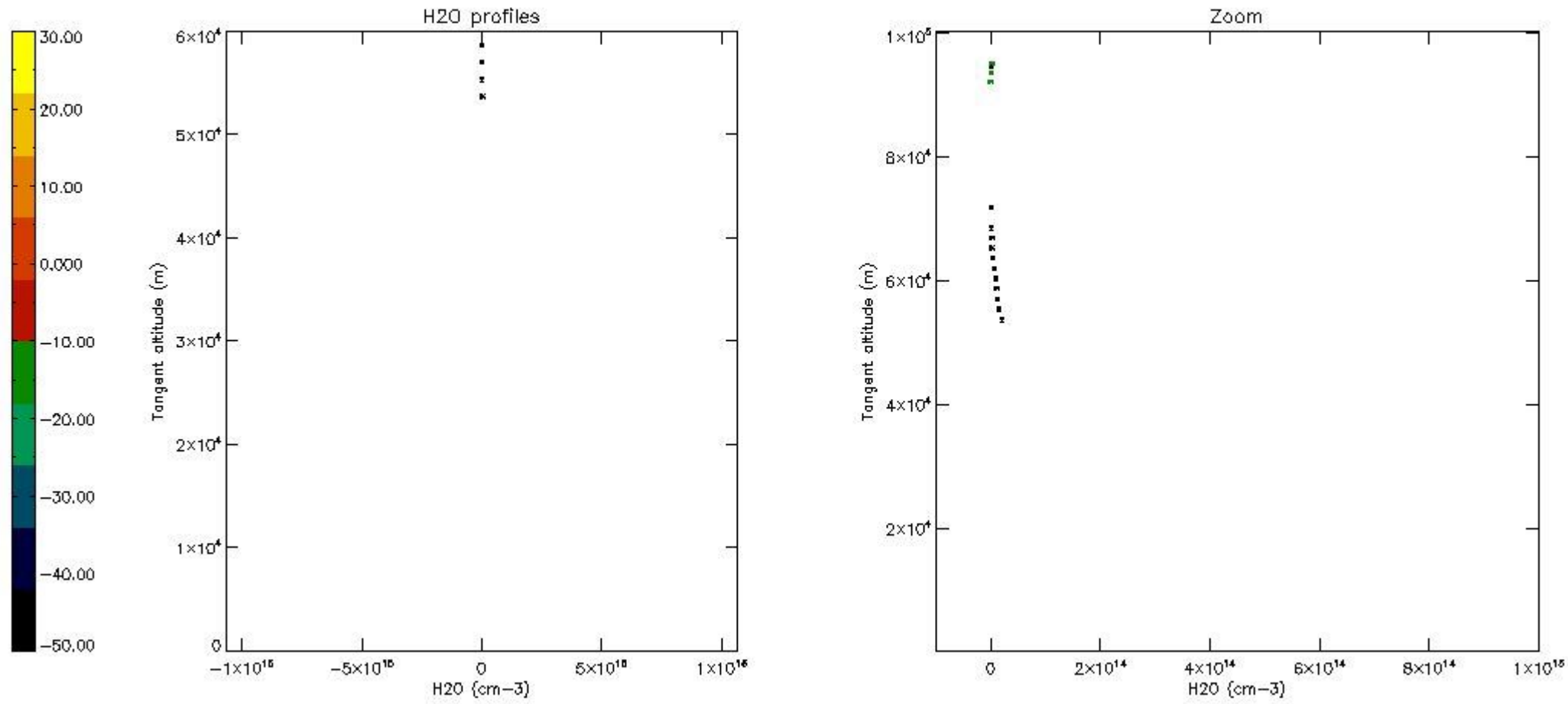
5.7 Plot NO3 profiles for all STD (dark without errors)

The colorbar represents the latitude.



5.8 Plot H2O profiles for all STD (only for occultations of stars 1,2,3,4,13,14,16,26,63 dark without errors)

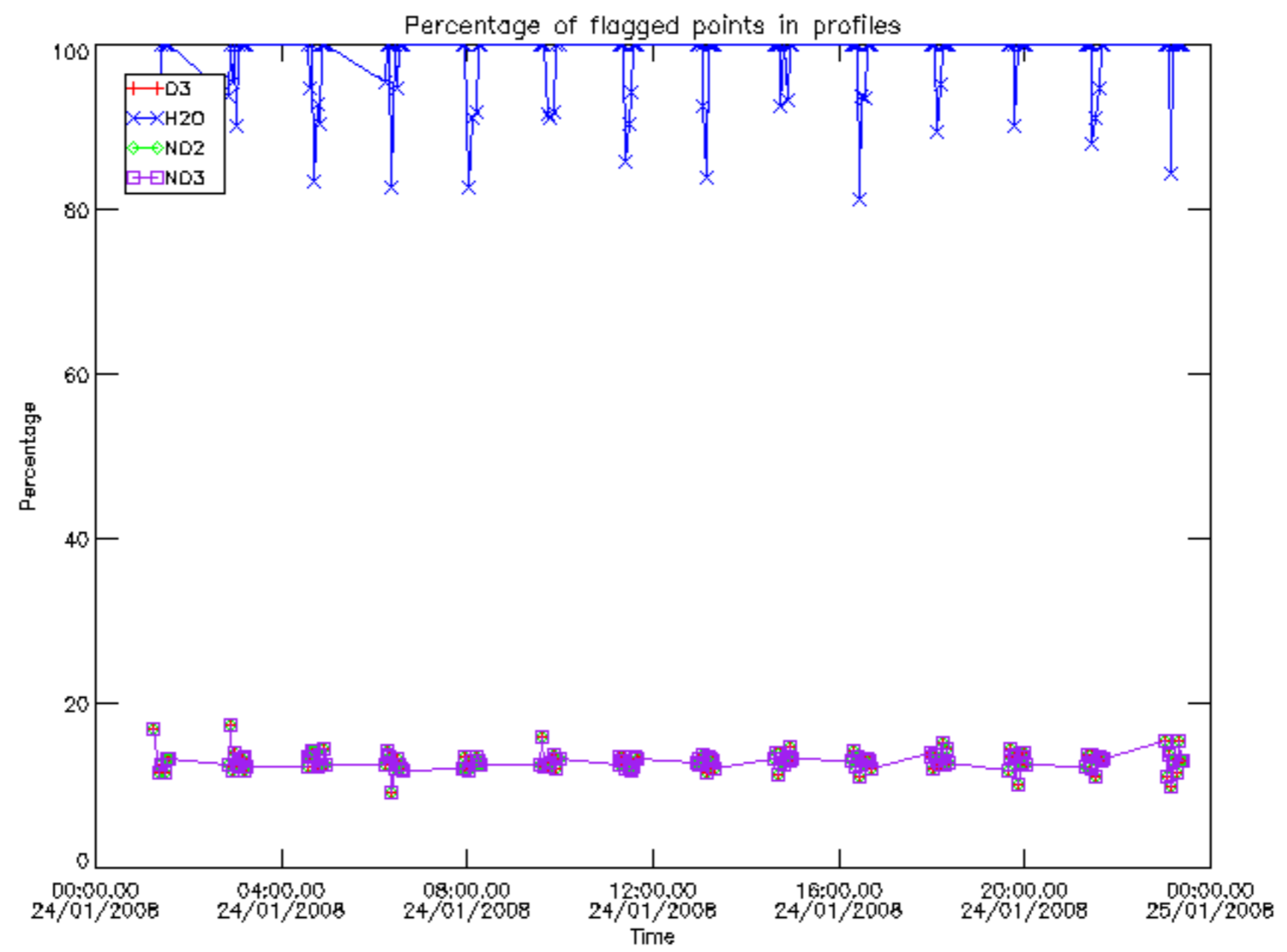
The colorbar represents the latitude.



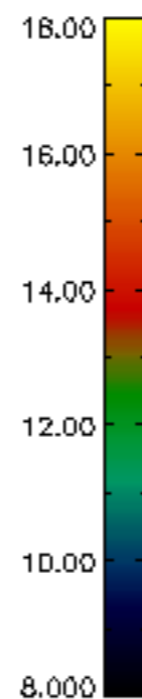
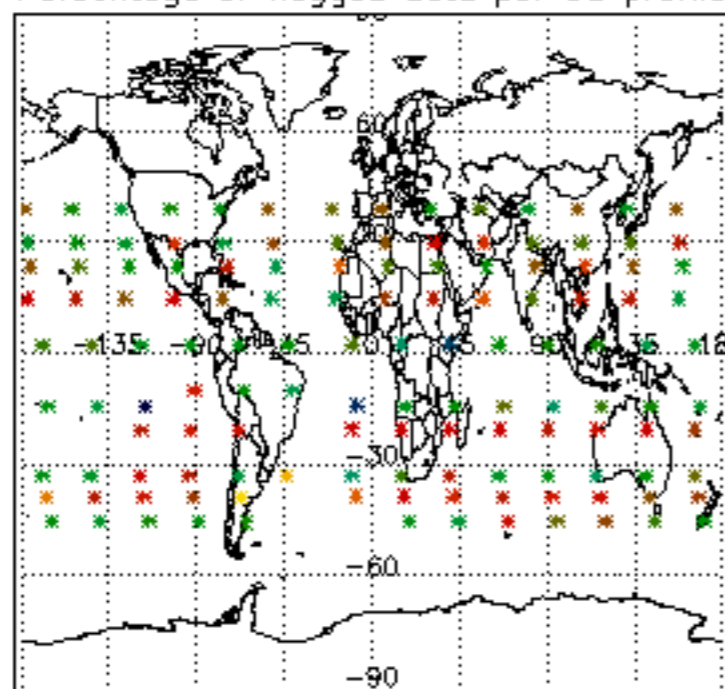
6. Auxiliary Data Files used for the production reported in section 2

The number reported in the third column indicates since which file (see list in section 2) the corresponding auxiliary file has been used. The fourth column is the date of those product files.

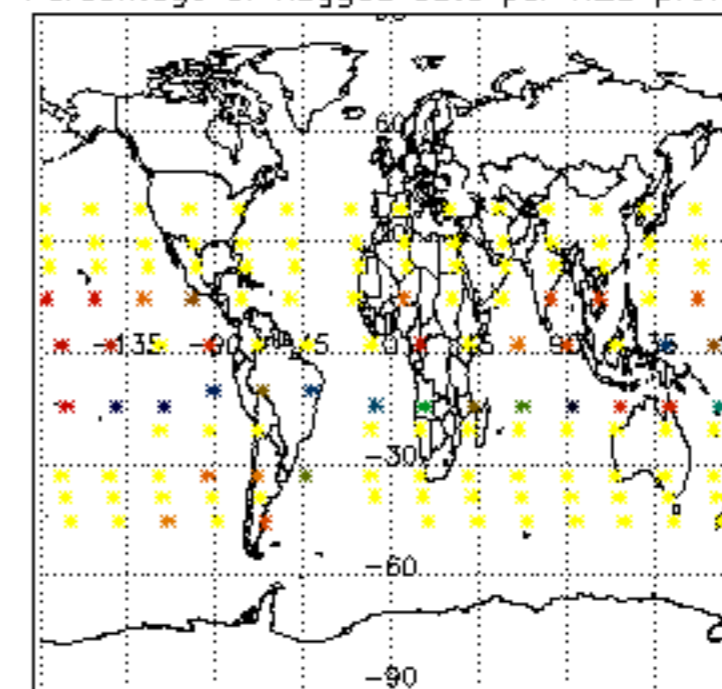
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	24-JAN-2008 00:00:46
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	24-JAN-2008 00:00:46
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	24-JAN-2008 00:00:46



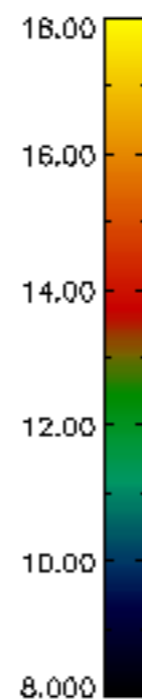
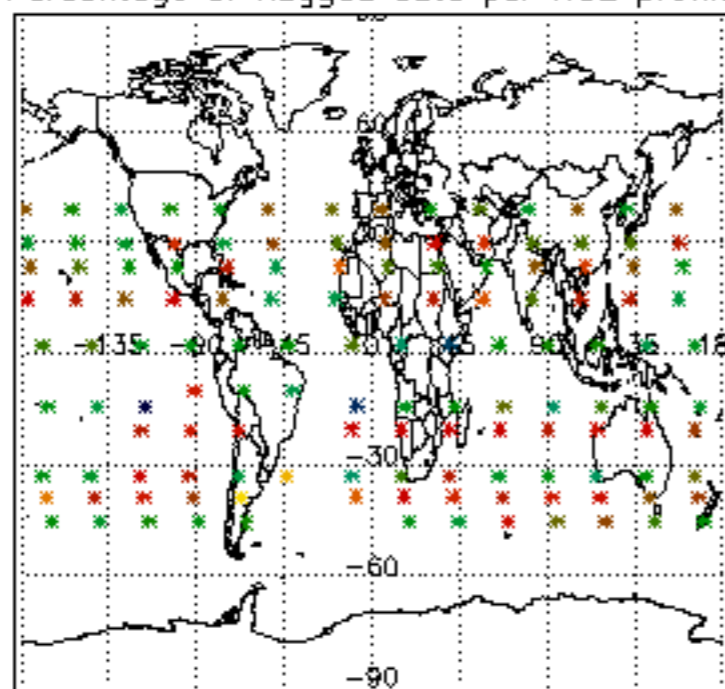
Percentage of flagged data per D3 profile



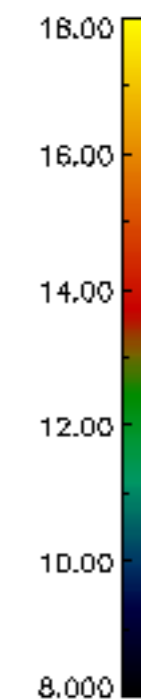
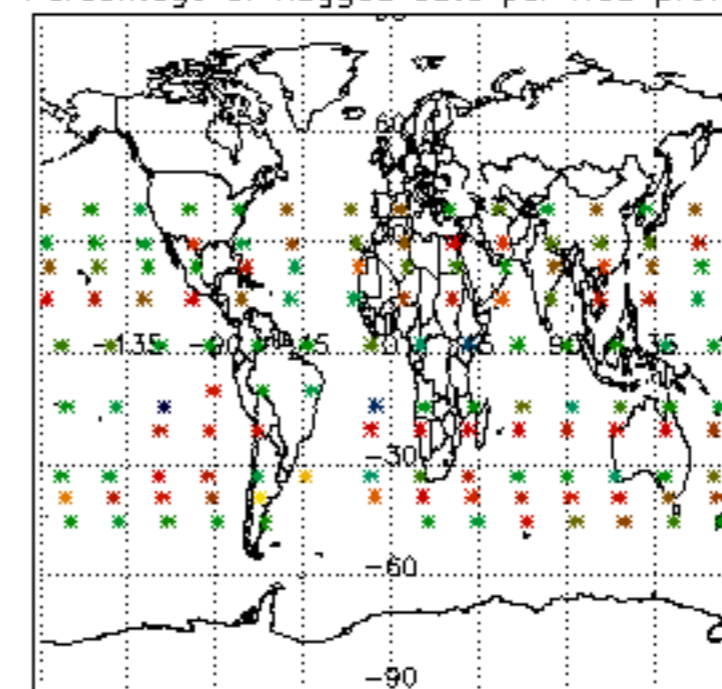
Percentage of flagged data per H2O profile

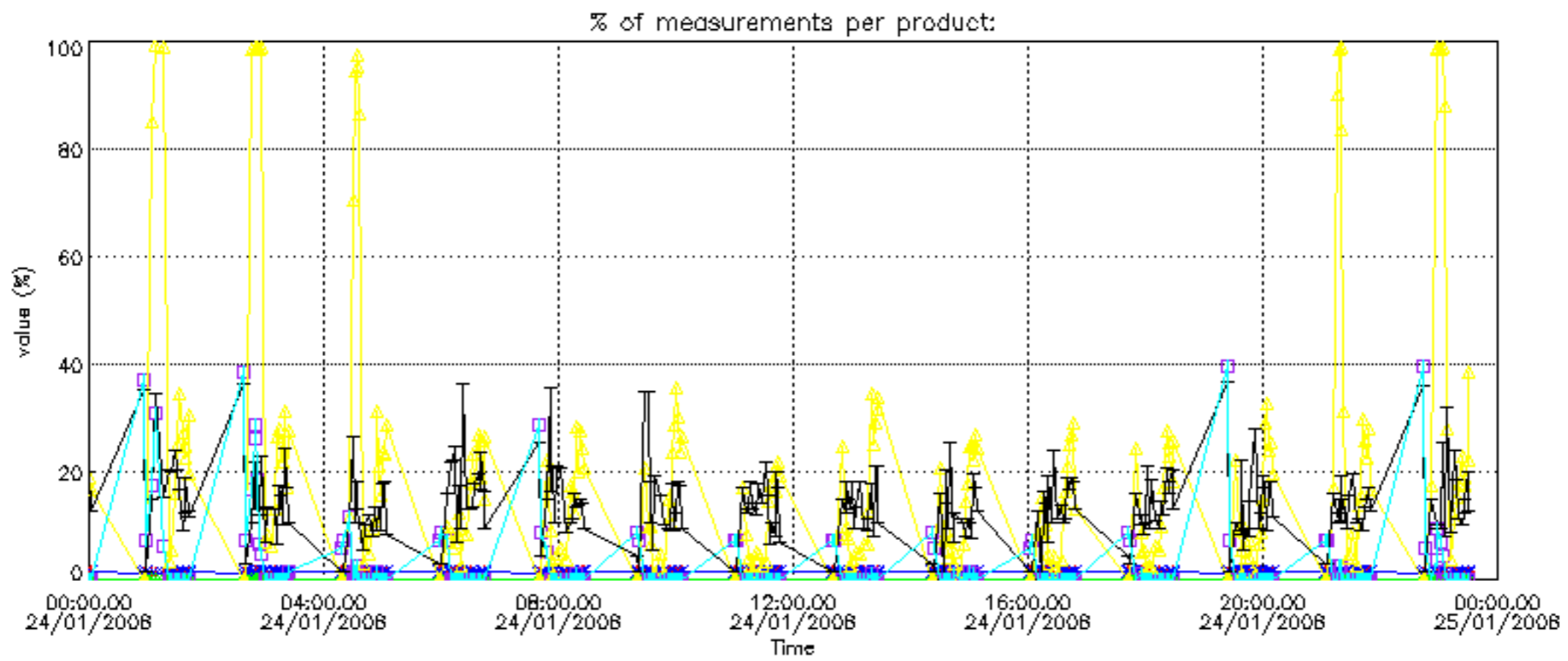


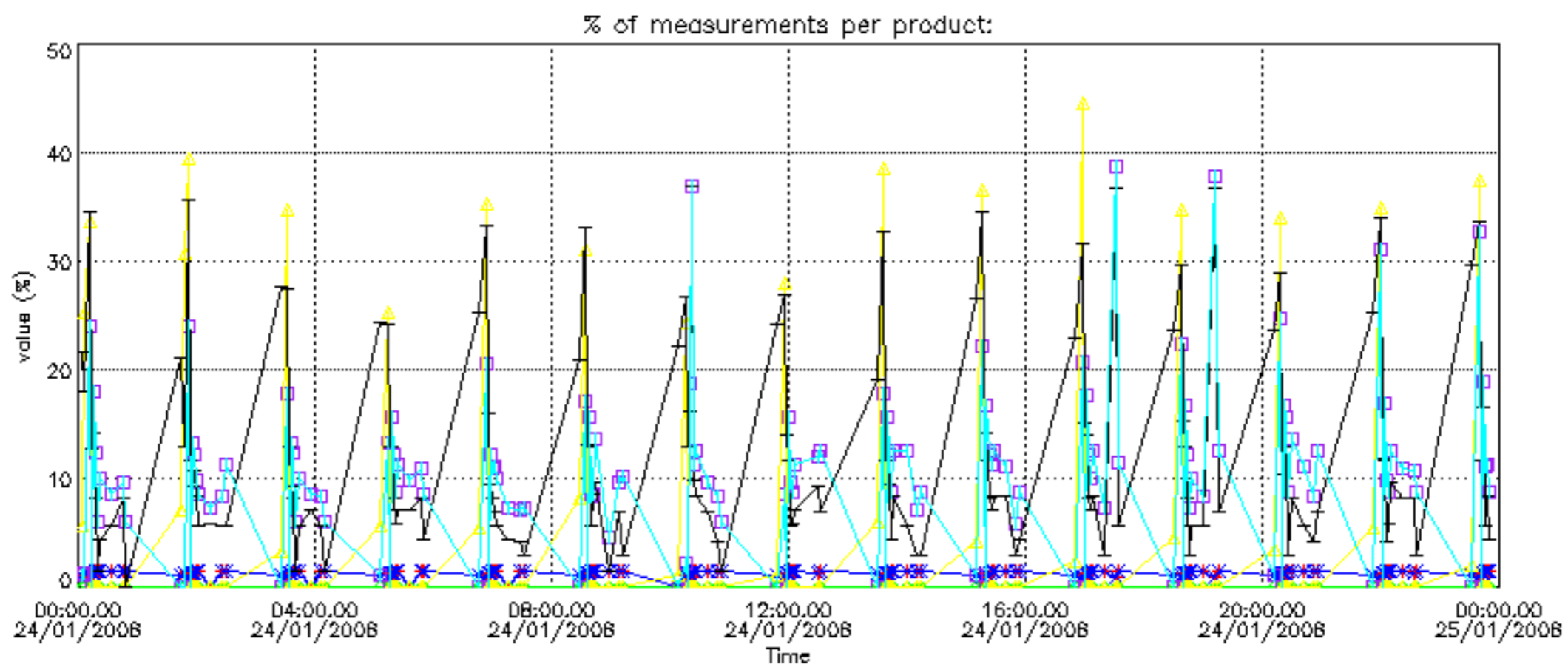
Percentage of flagged data per NO2 profile



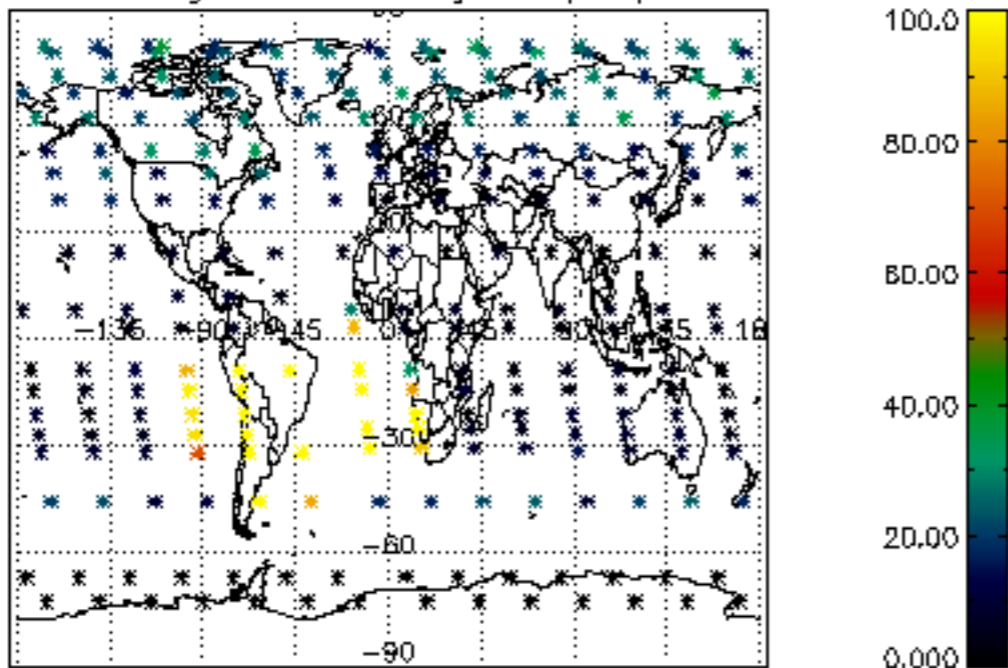
Percentage of flagged data per NO3 profile



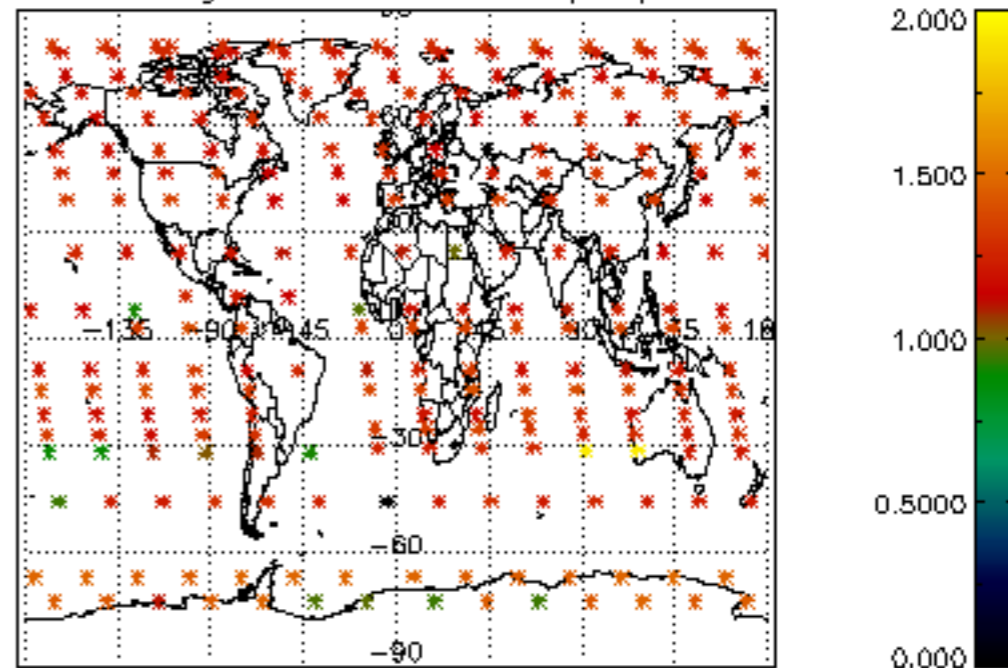




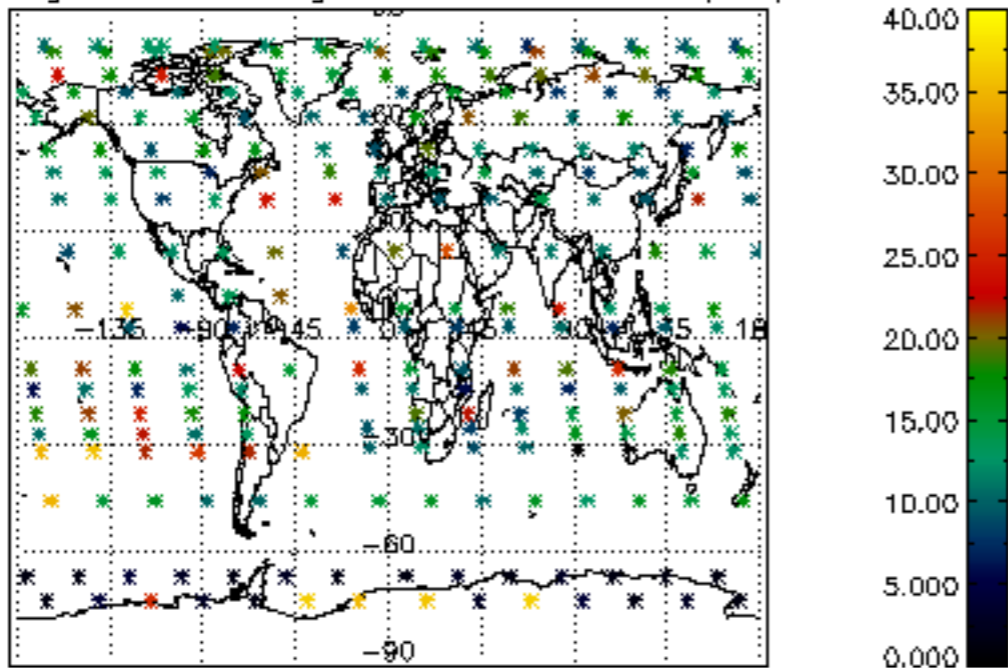
Percentage of cosmic ray hits per profile



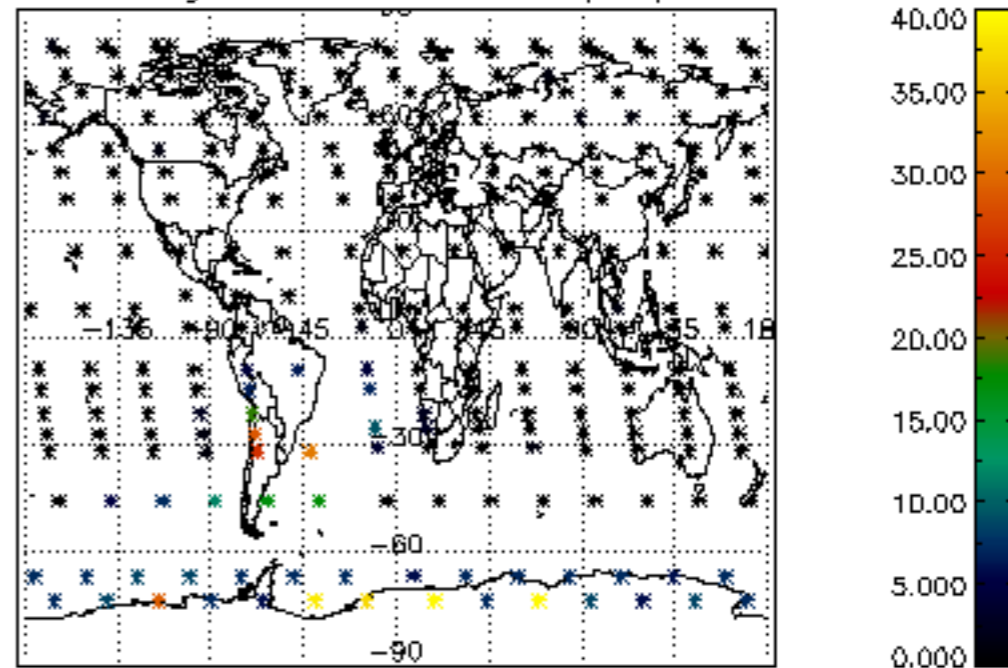
Percentage of datation errors per profile



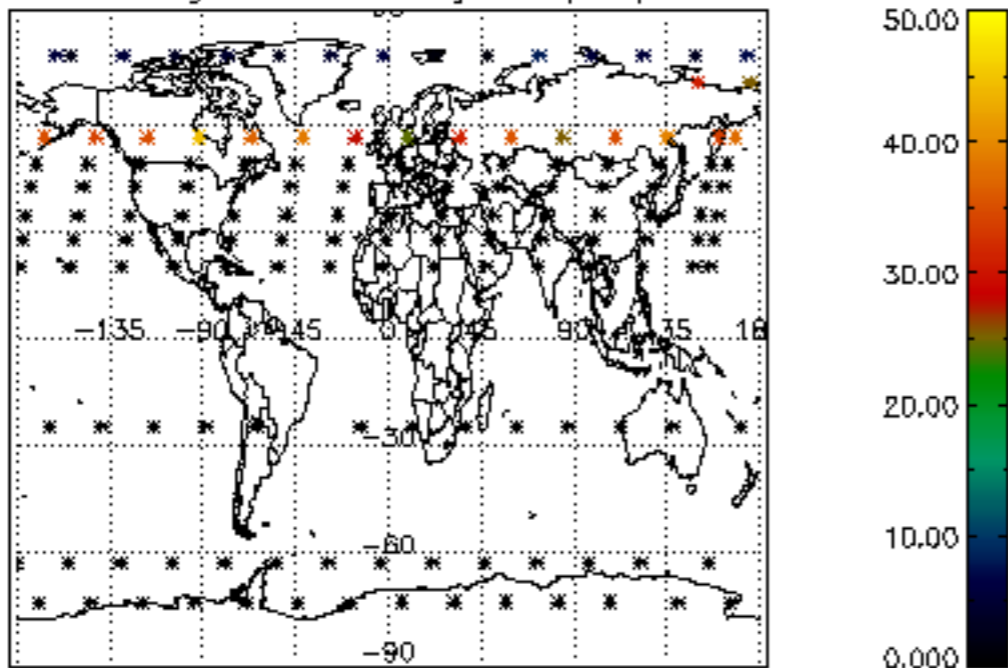
Percentage of star falling outside central band per profile



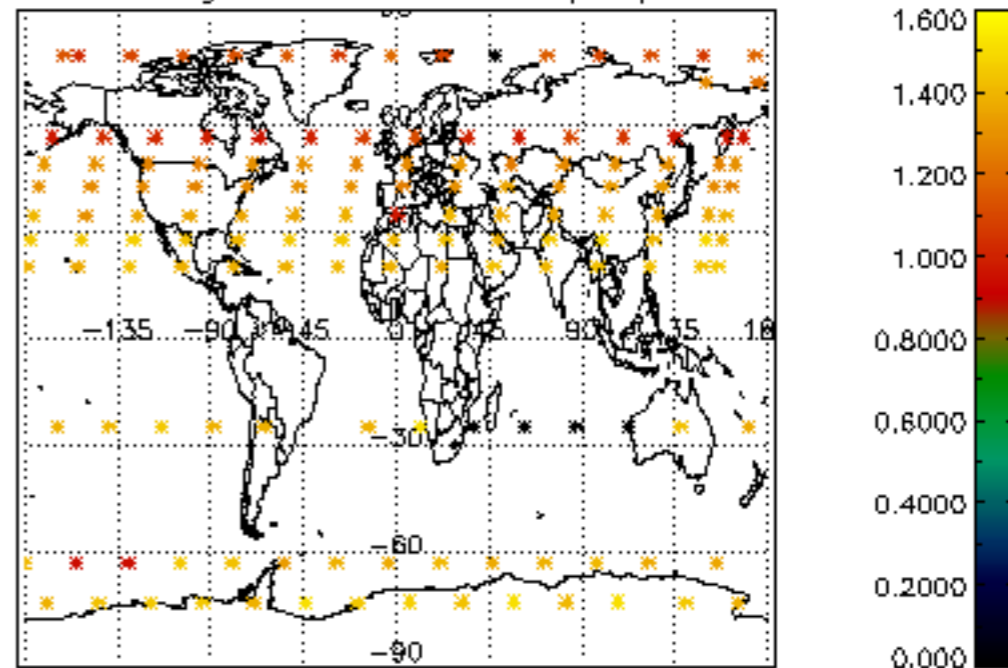
Percentage of saturation errors per profile



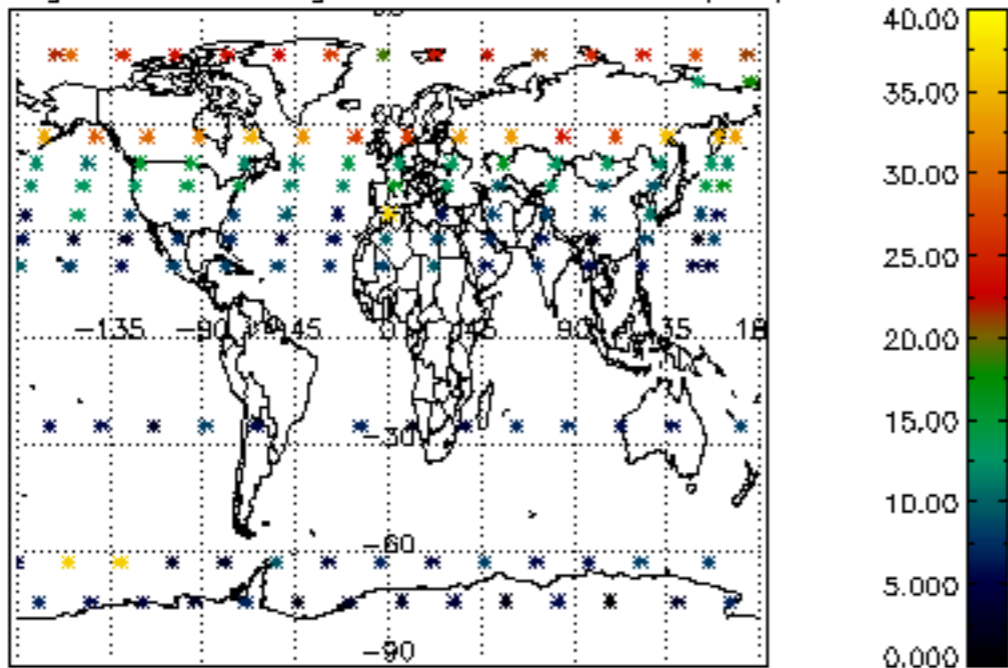
Percentage of cosmic ray hits per profile



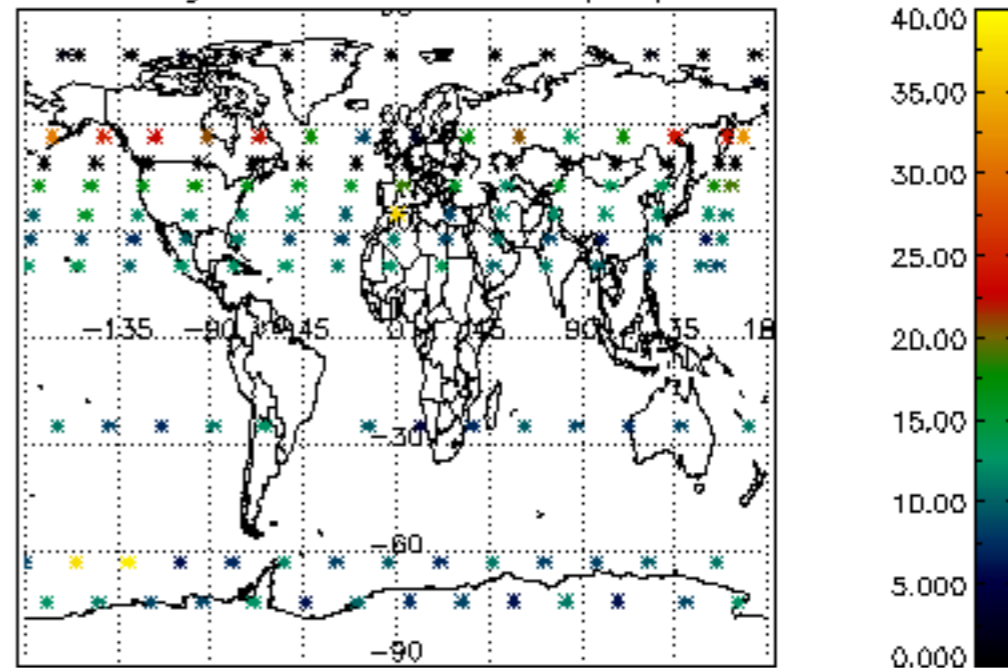
Percentage of datation errors per profile

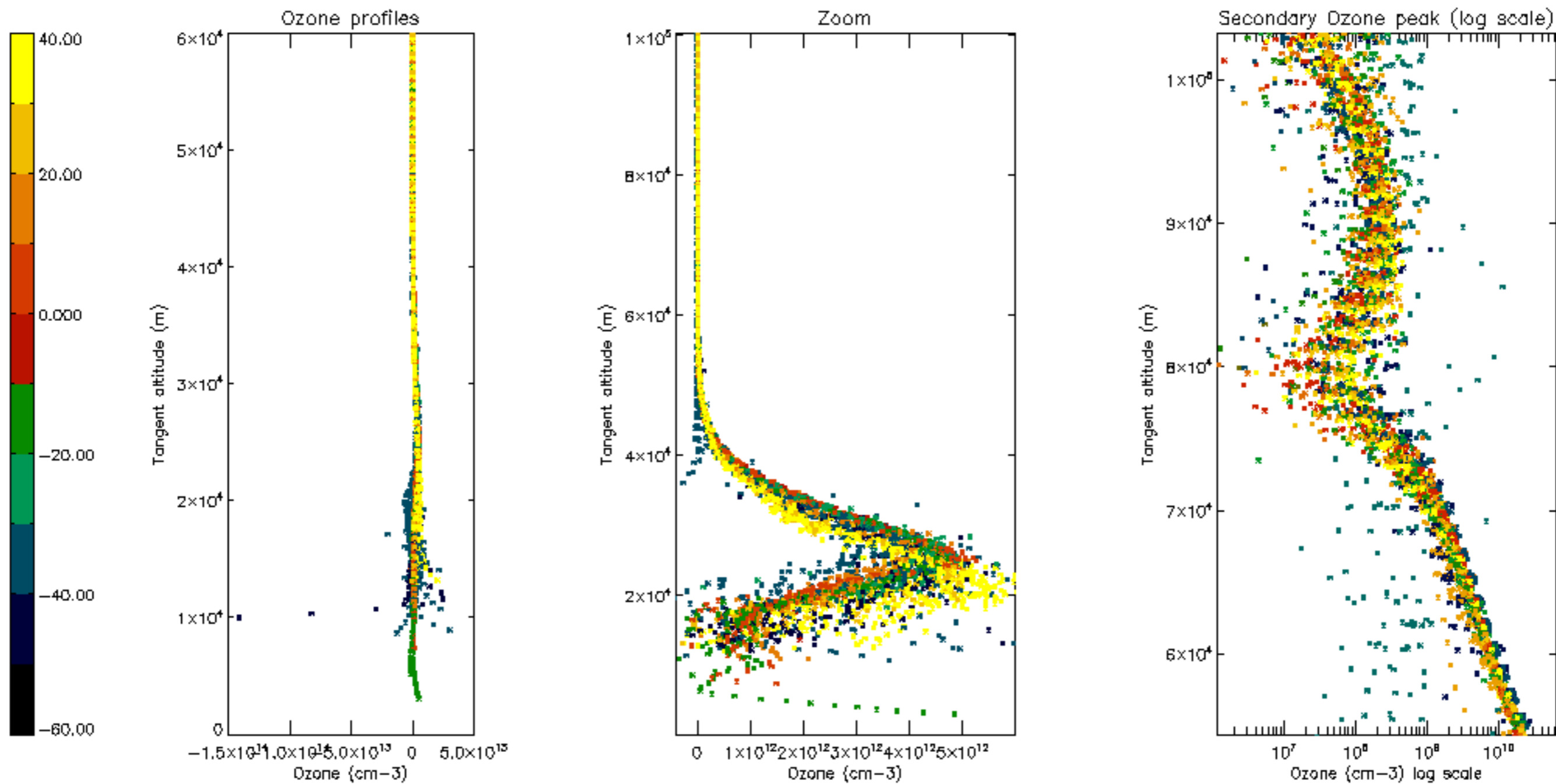


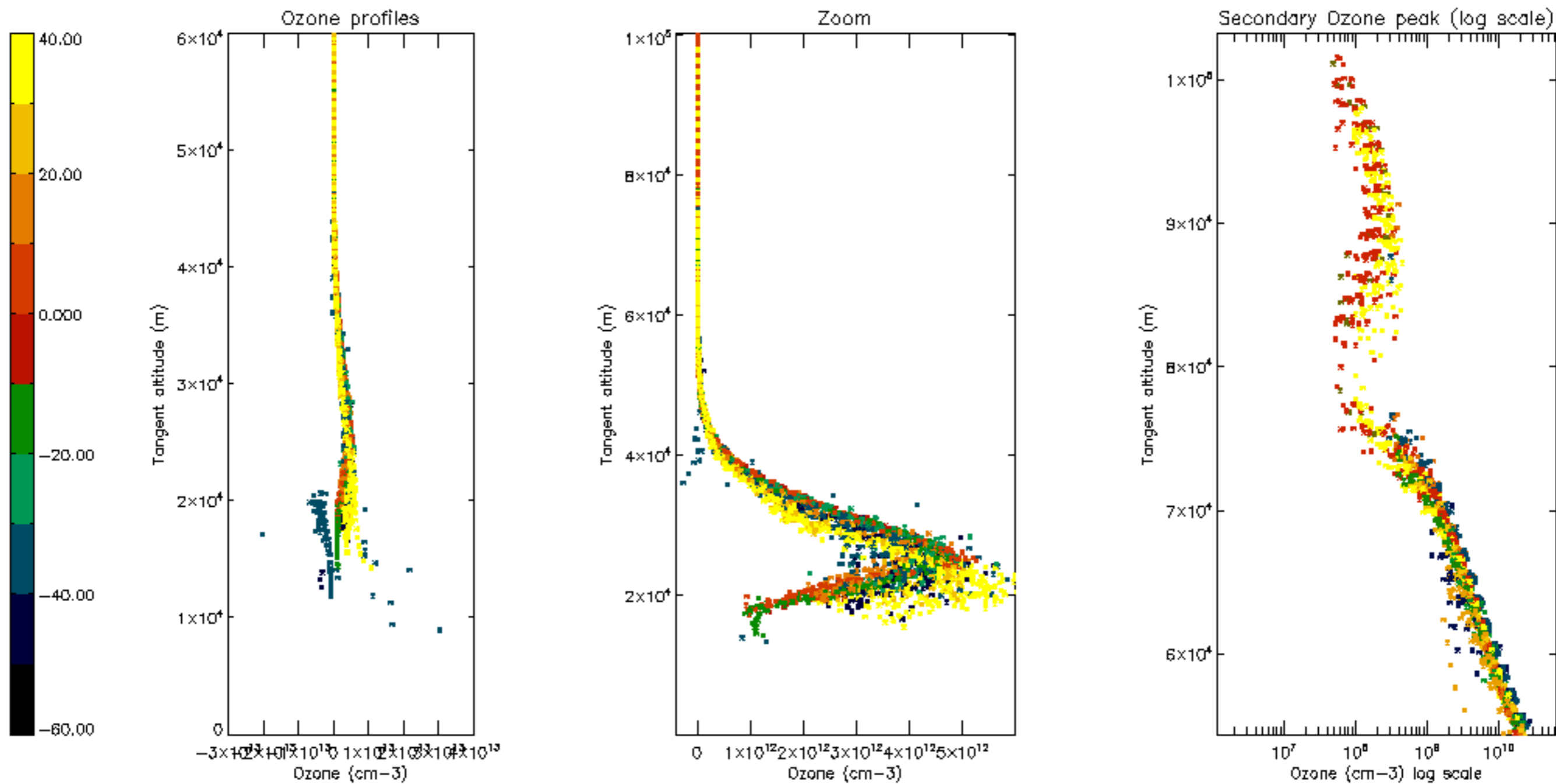
Percentage of star falling outside central band per profile

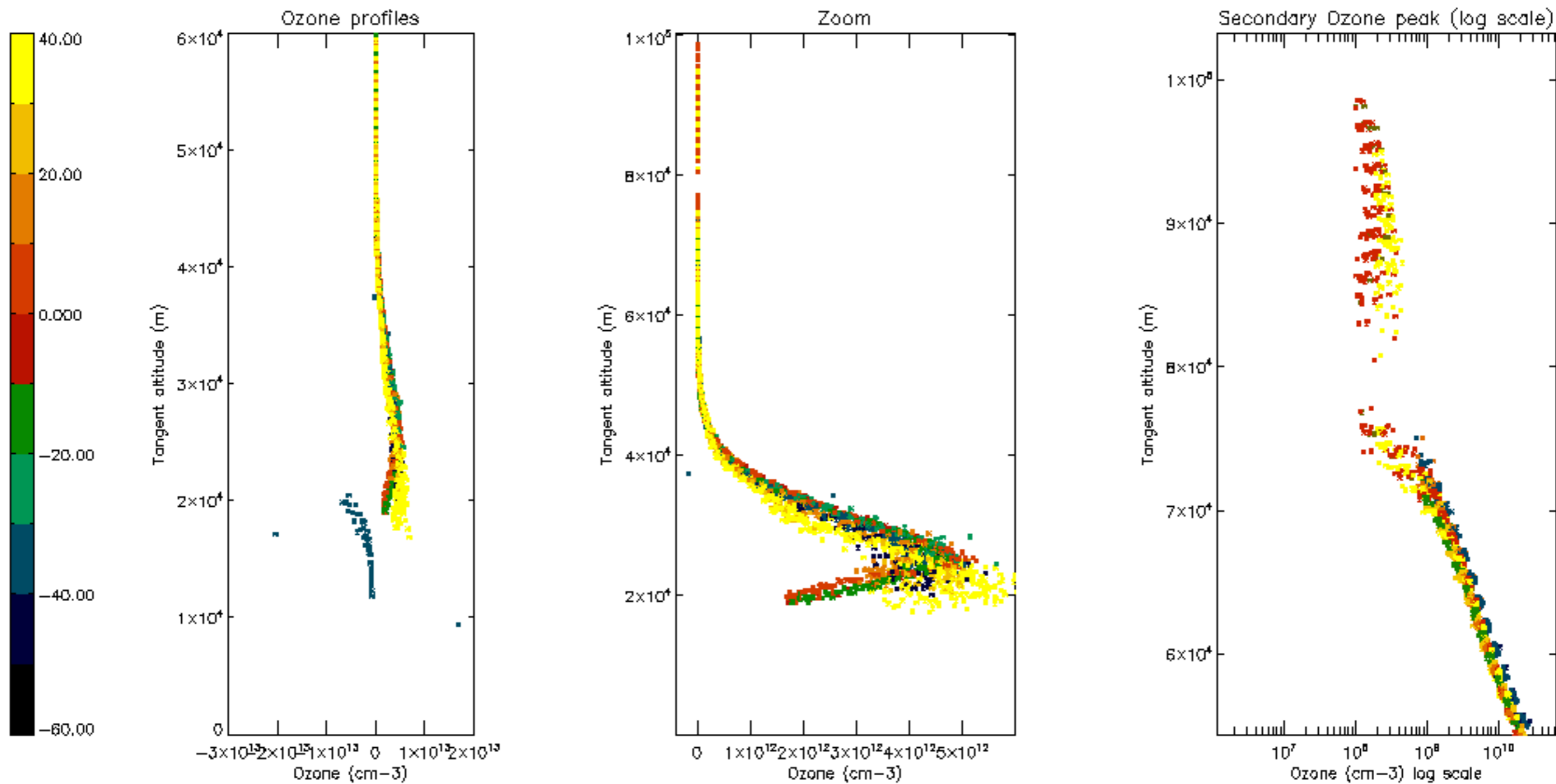


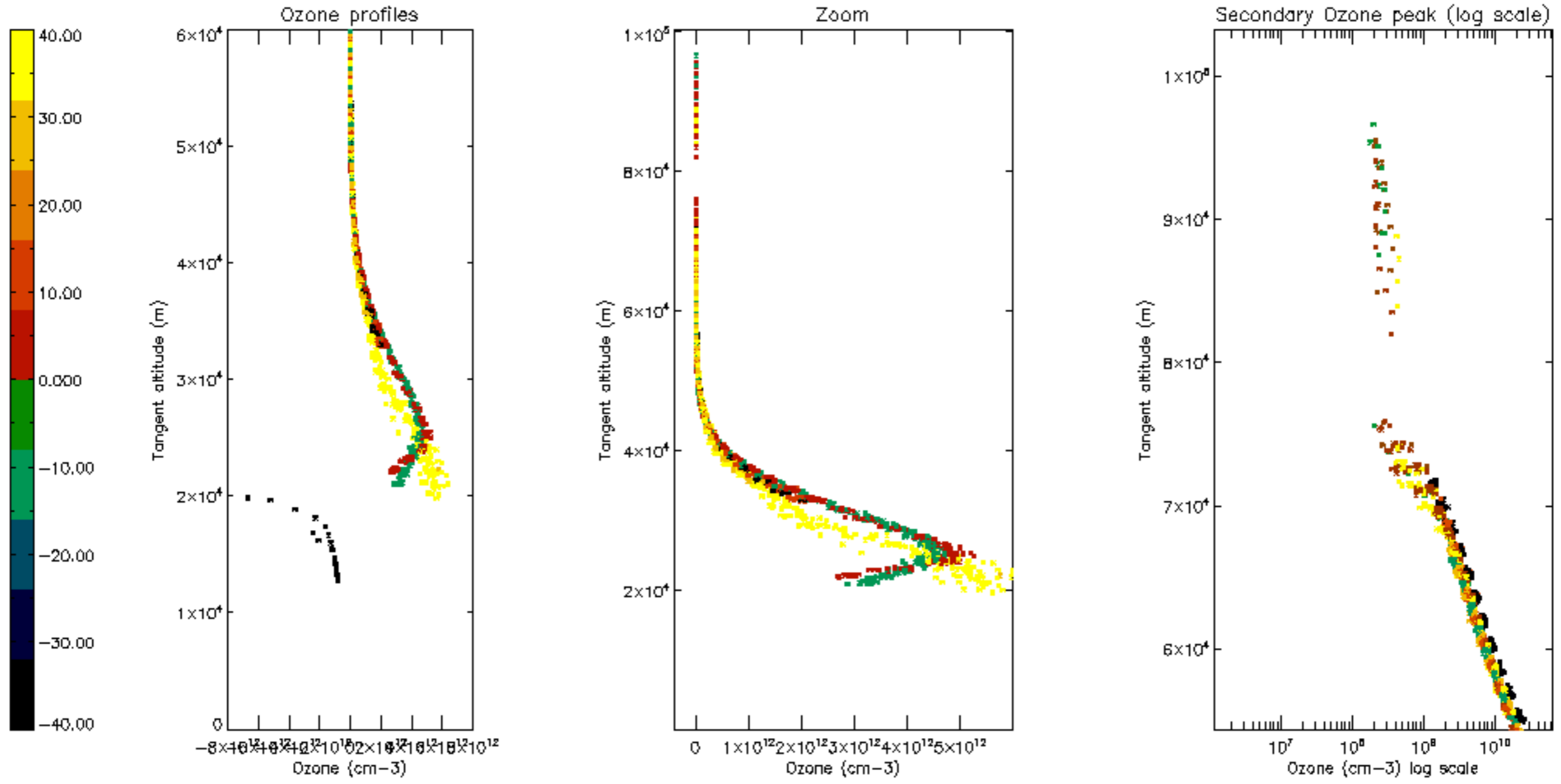
Percentage of saturation errors per profile

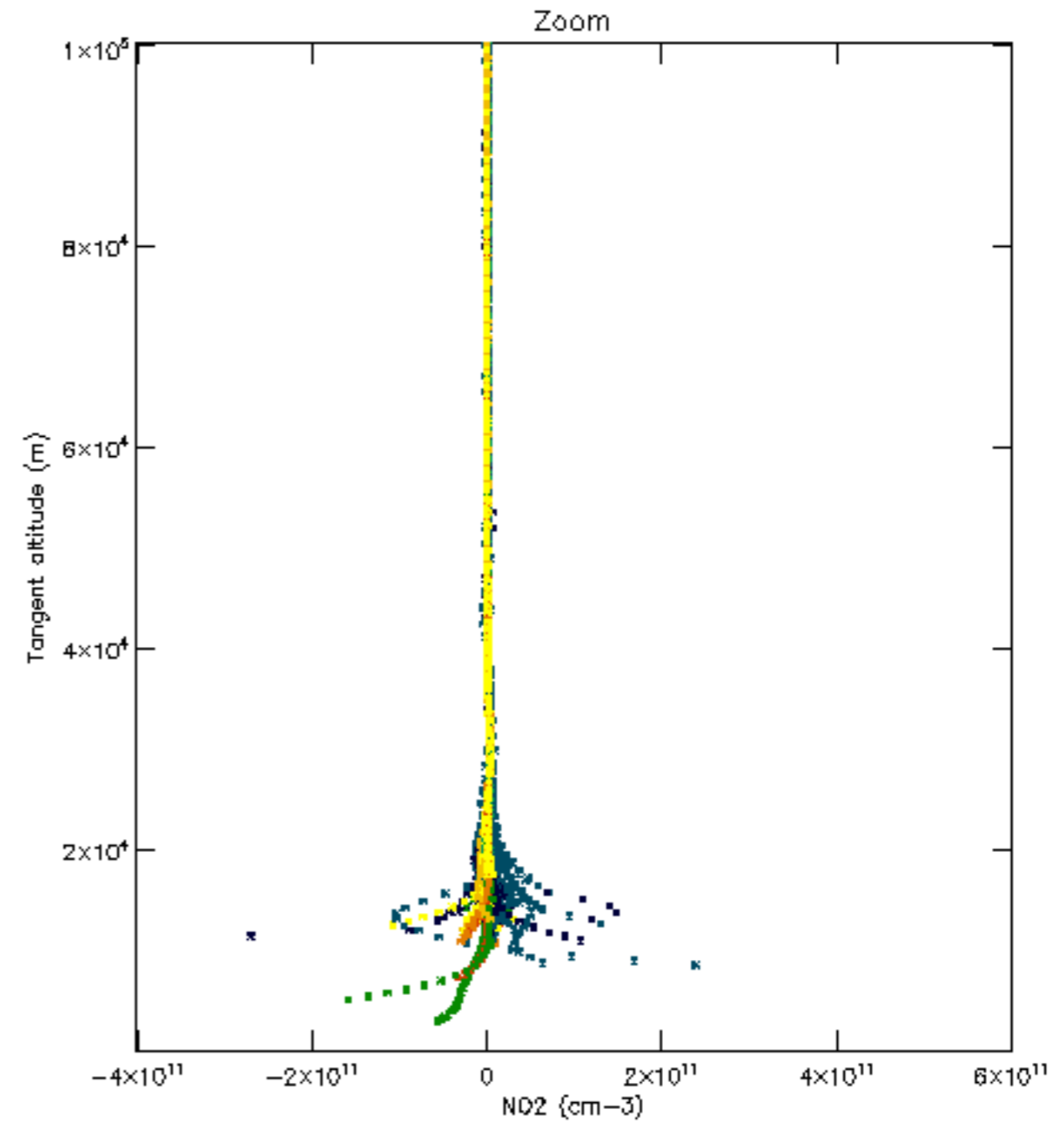
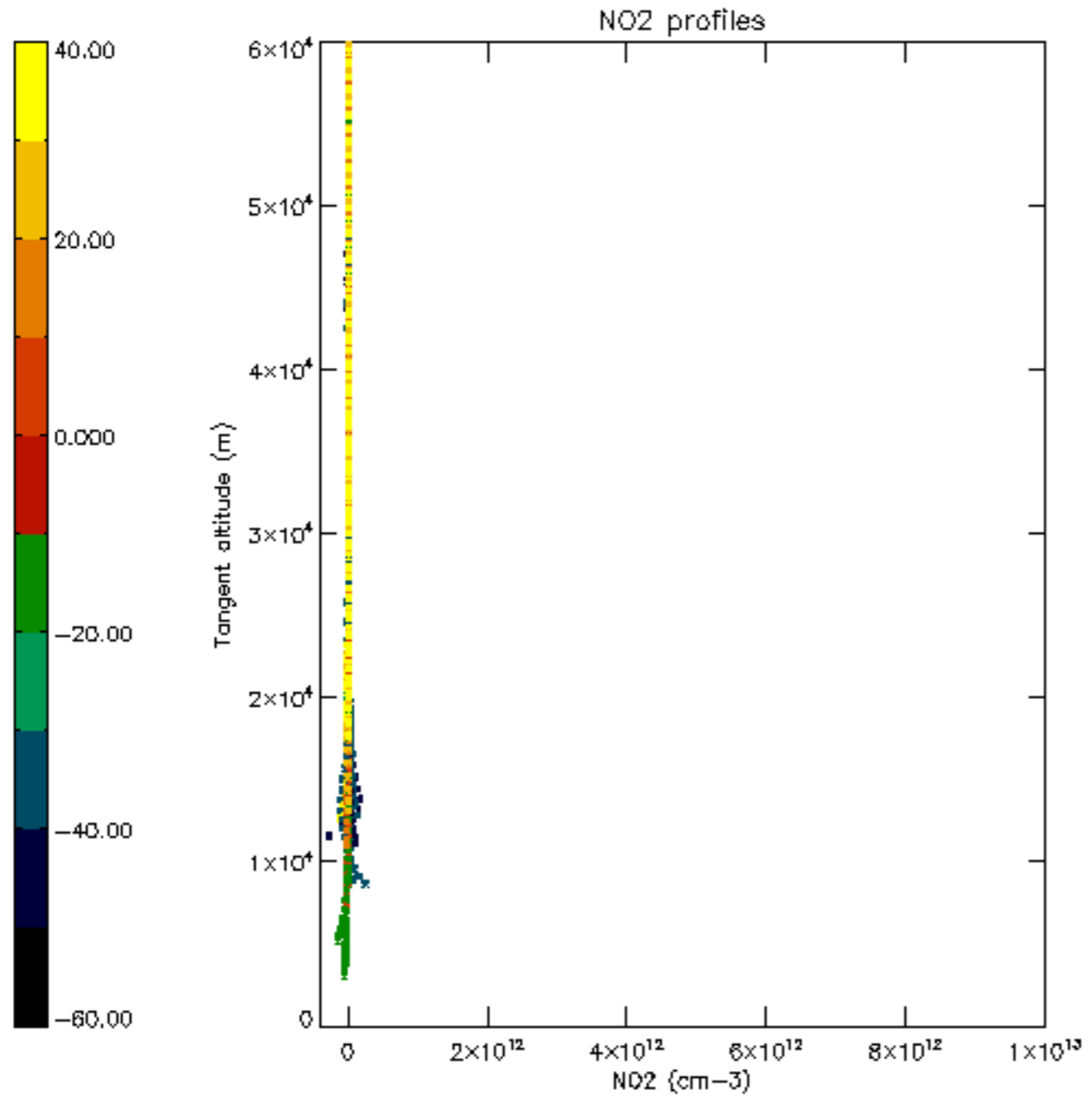


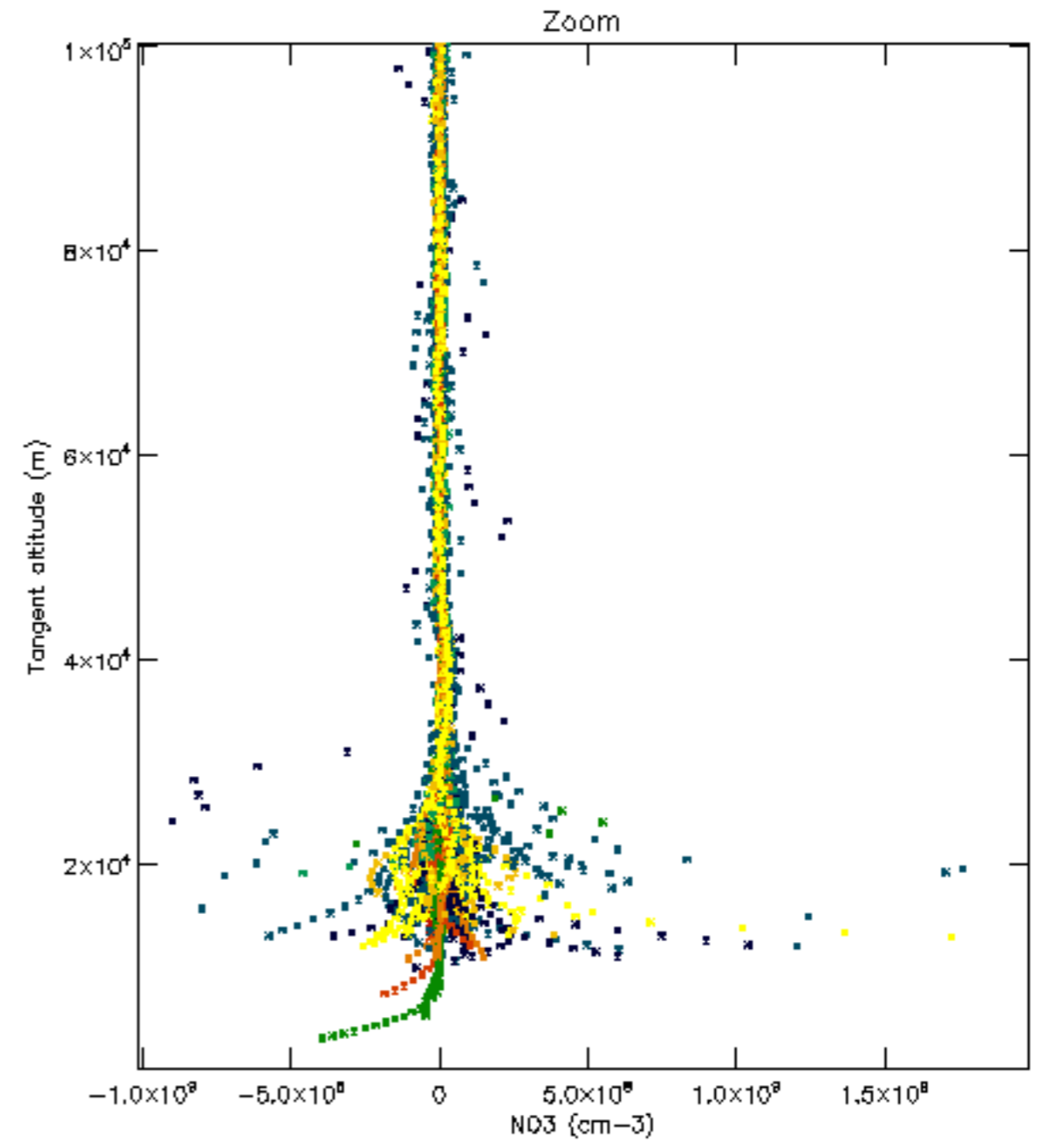
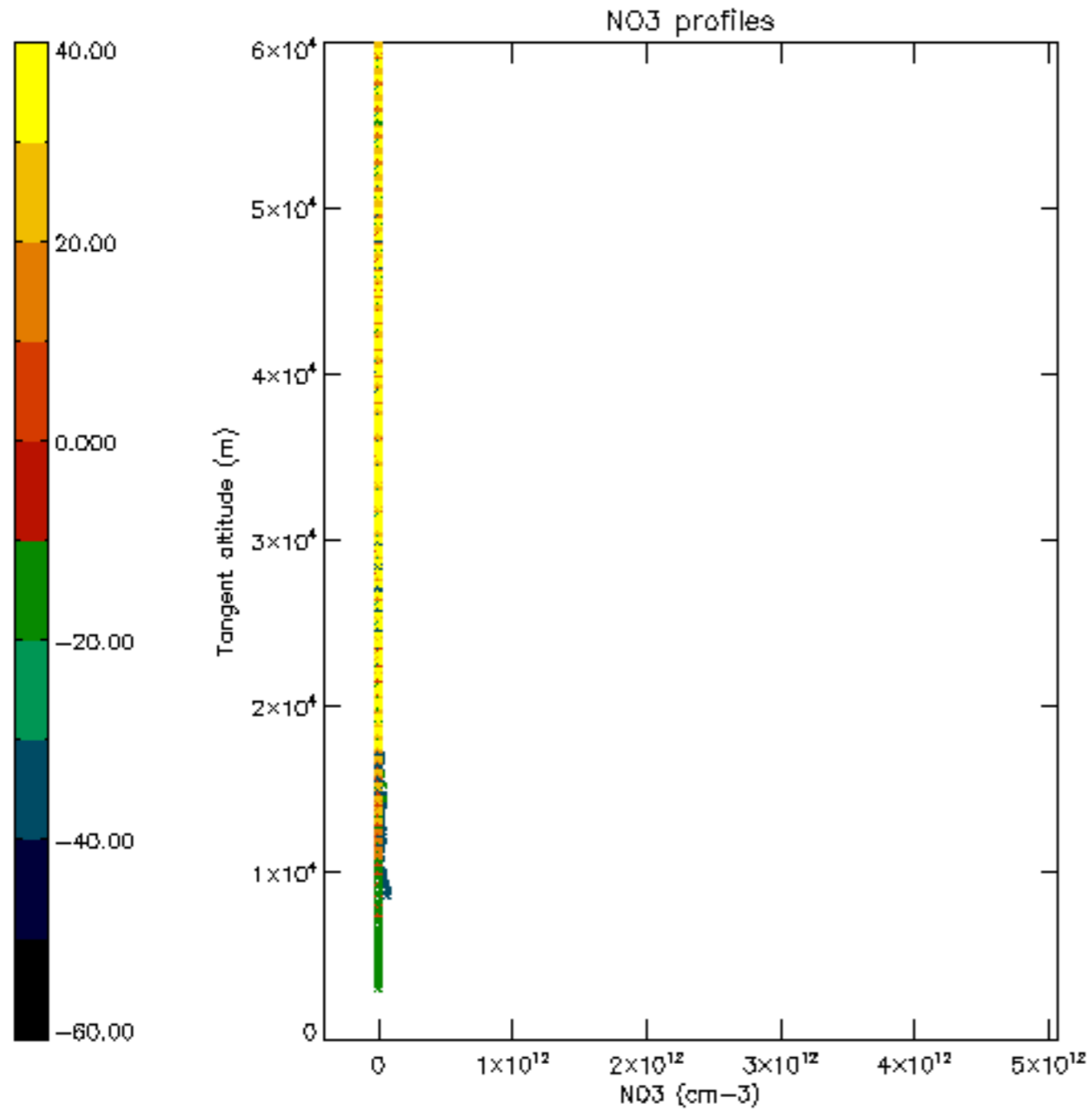


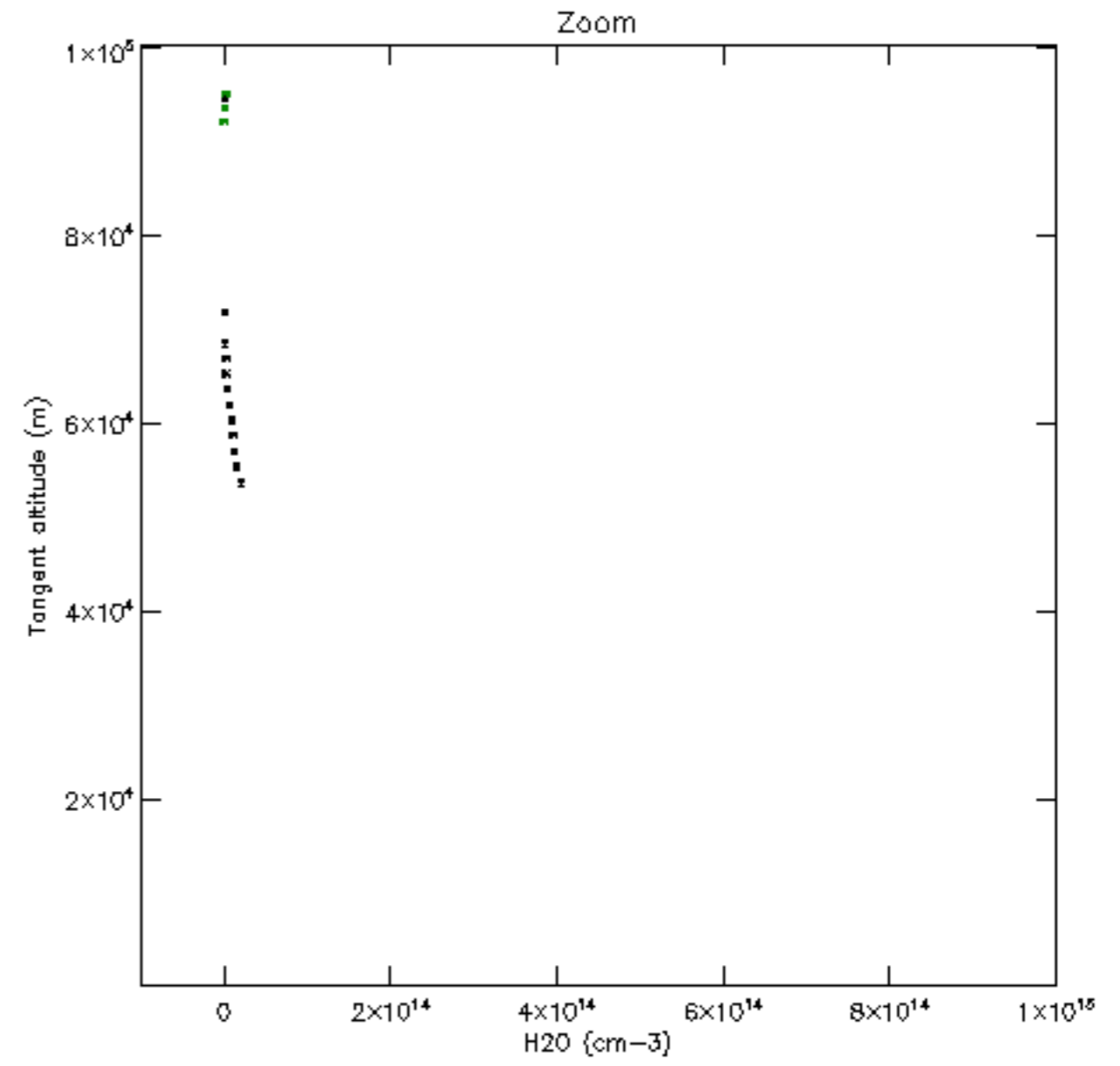
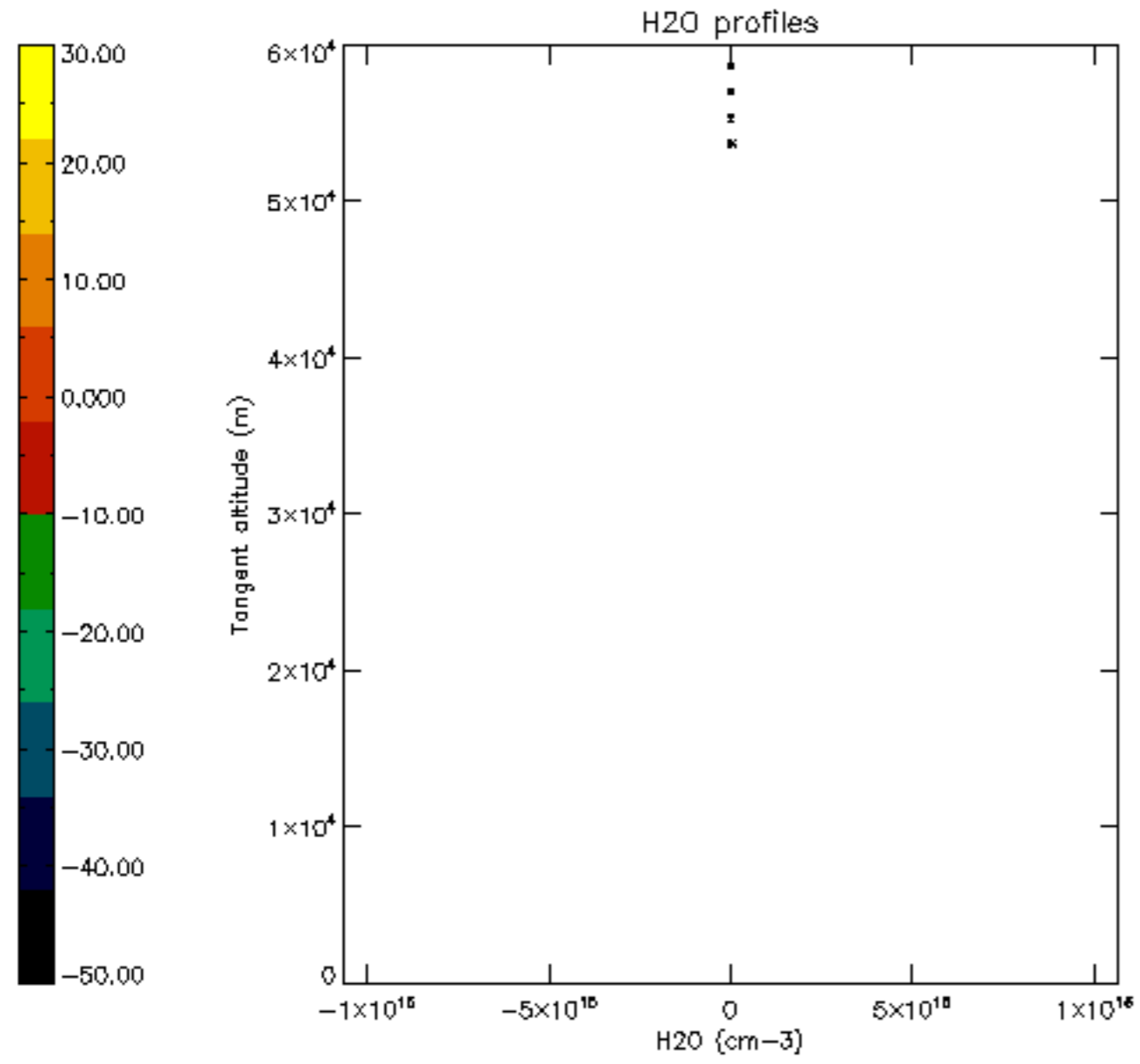


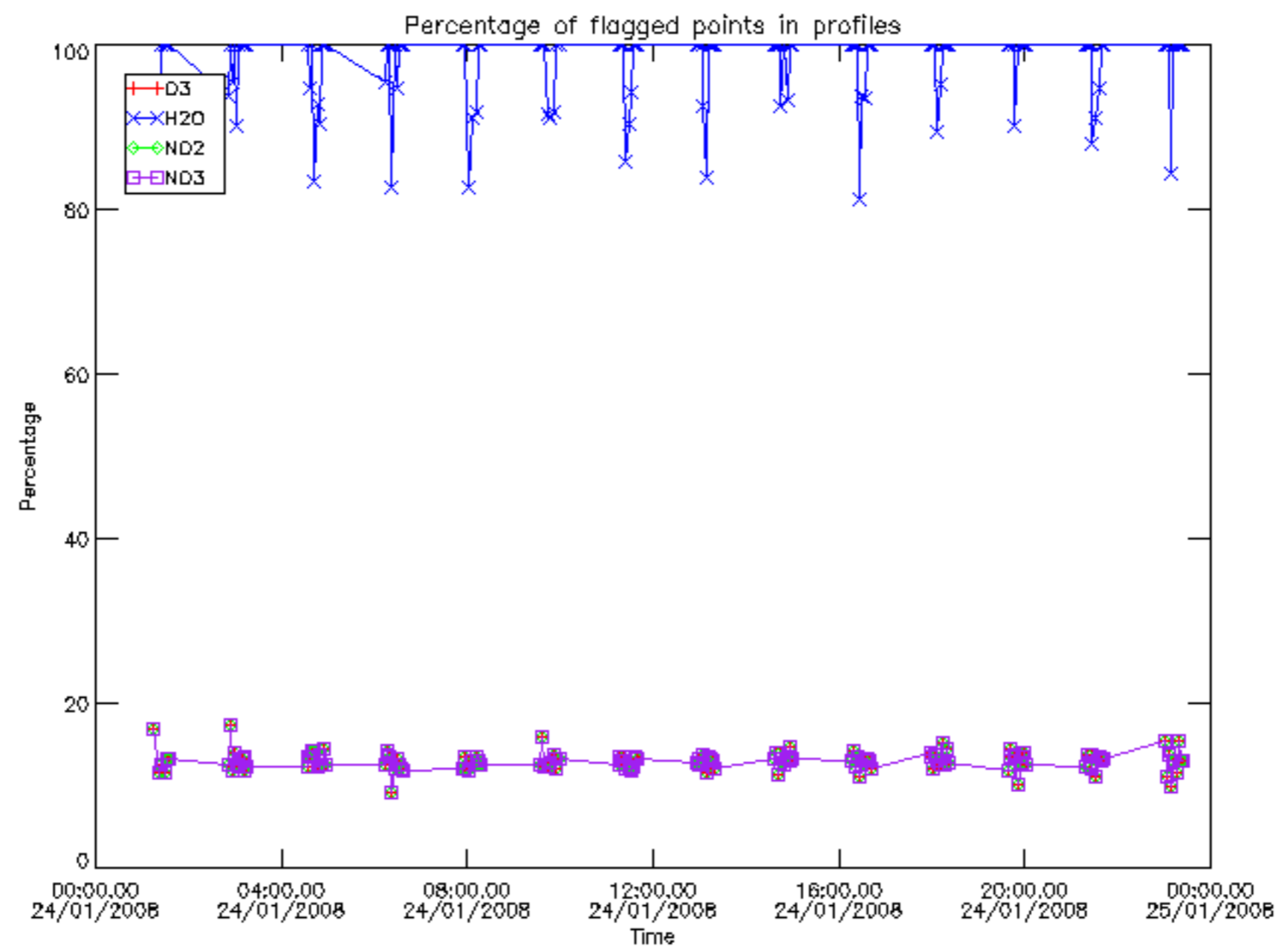




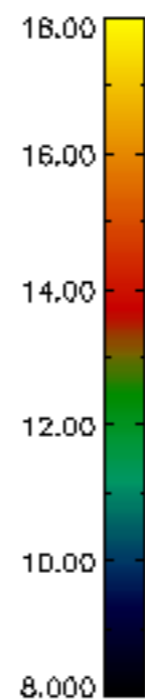
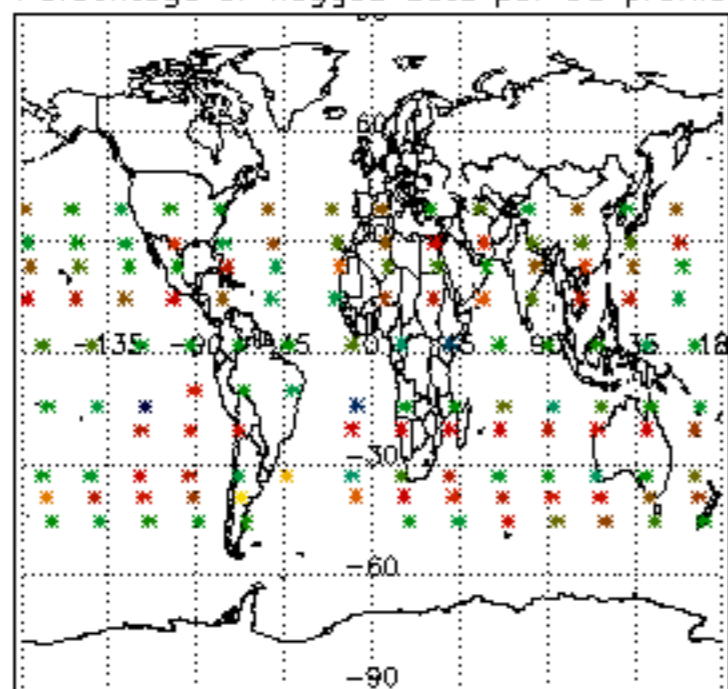




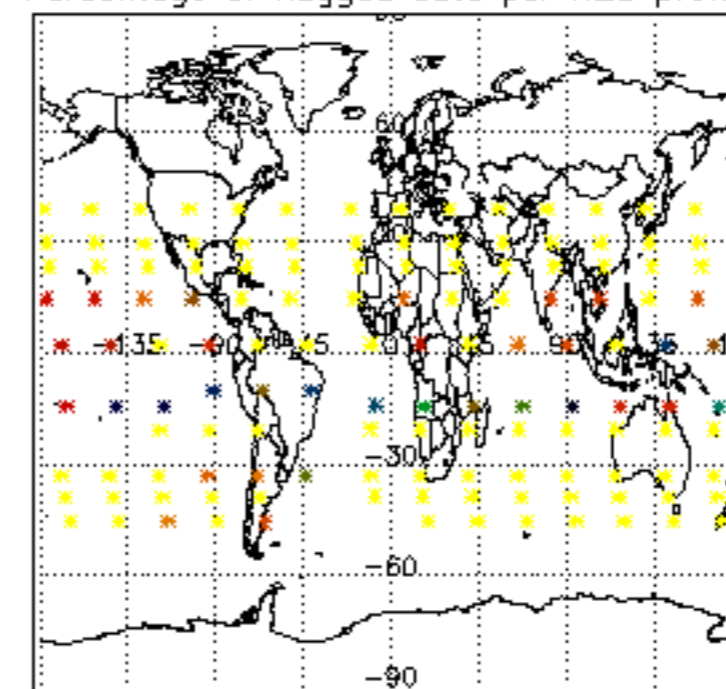




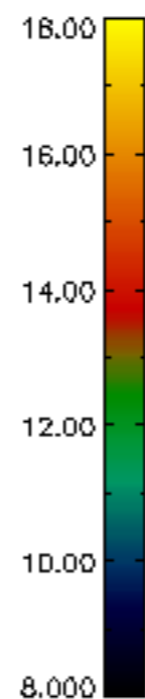
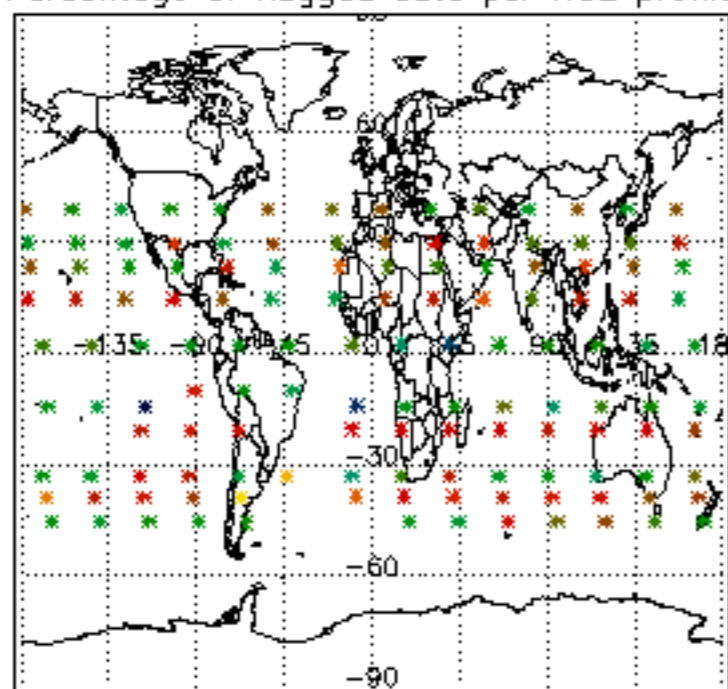
Percentage of flagged data per D3 profile



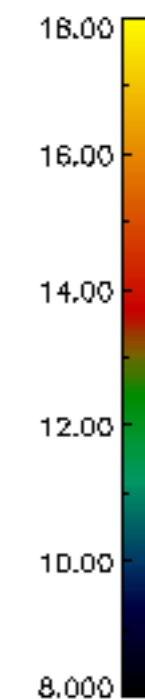
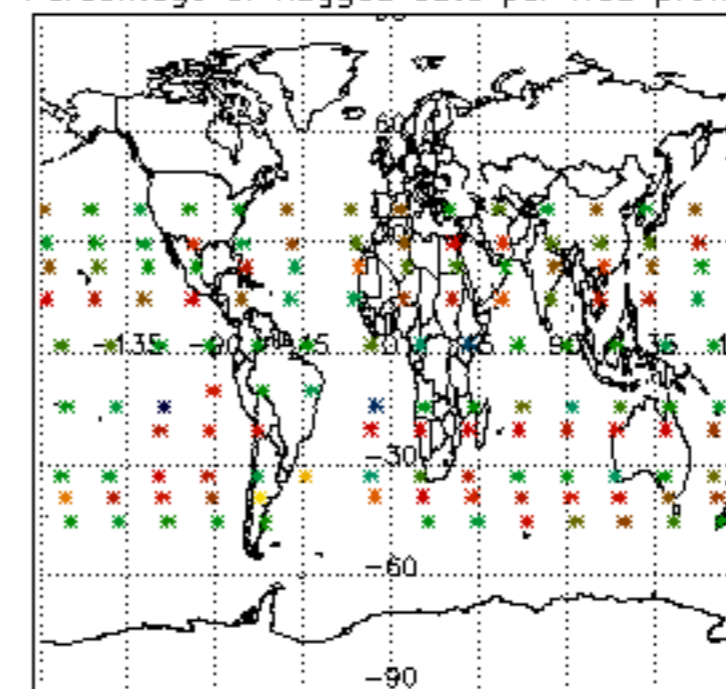
Percentage of flagged data per H2O profile

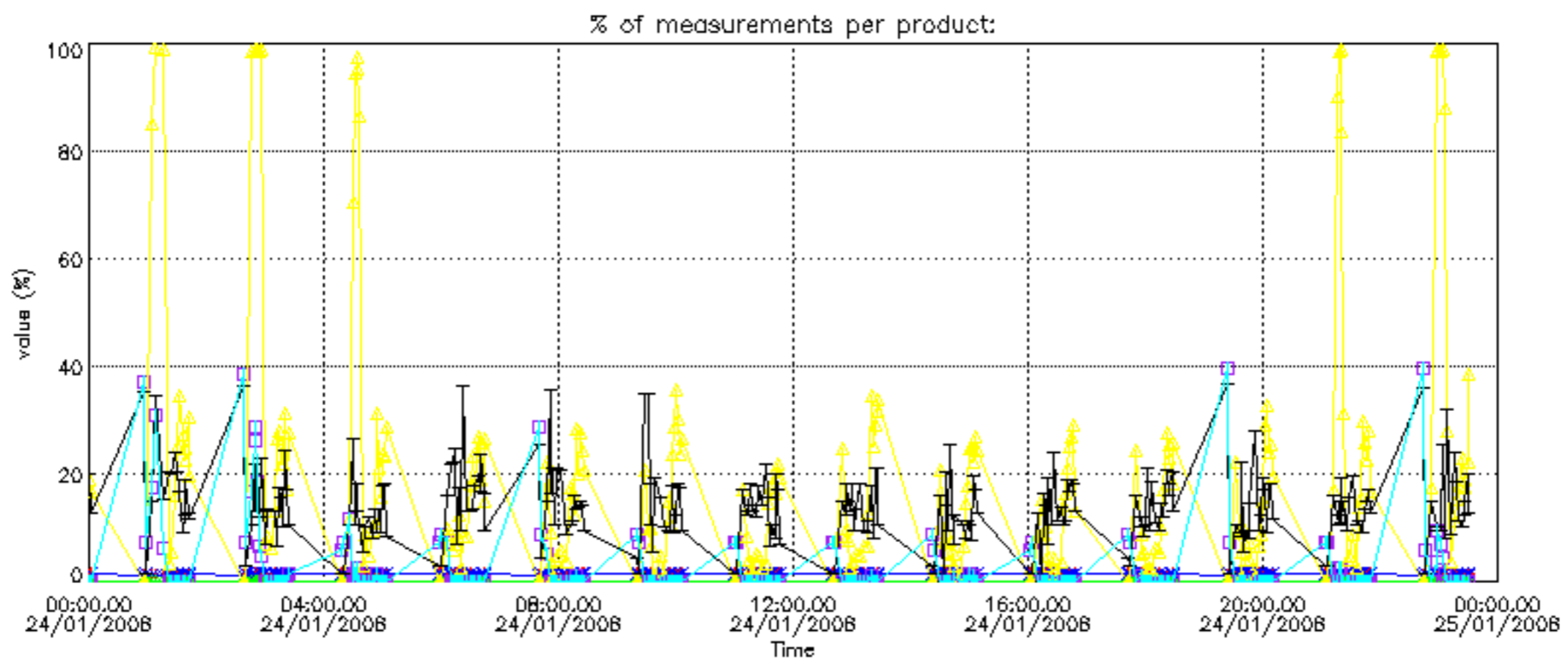


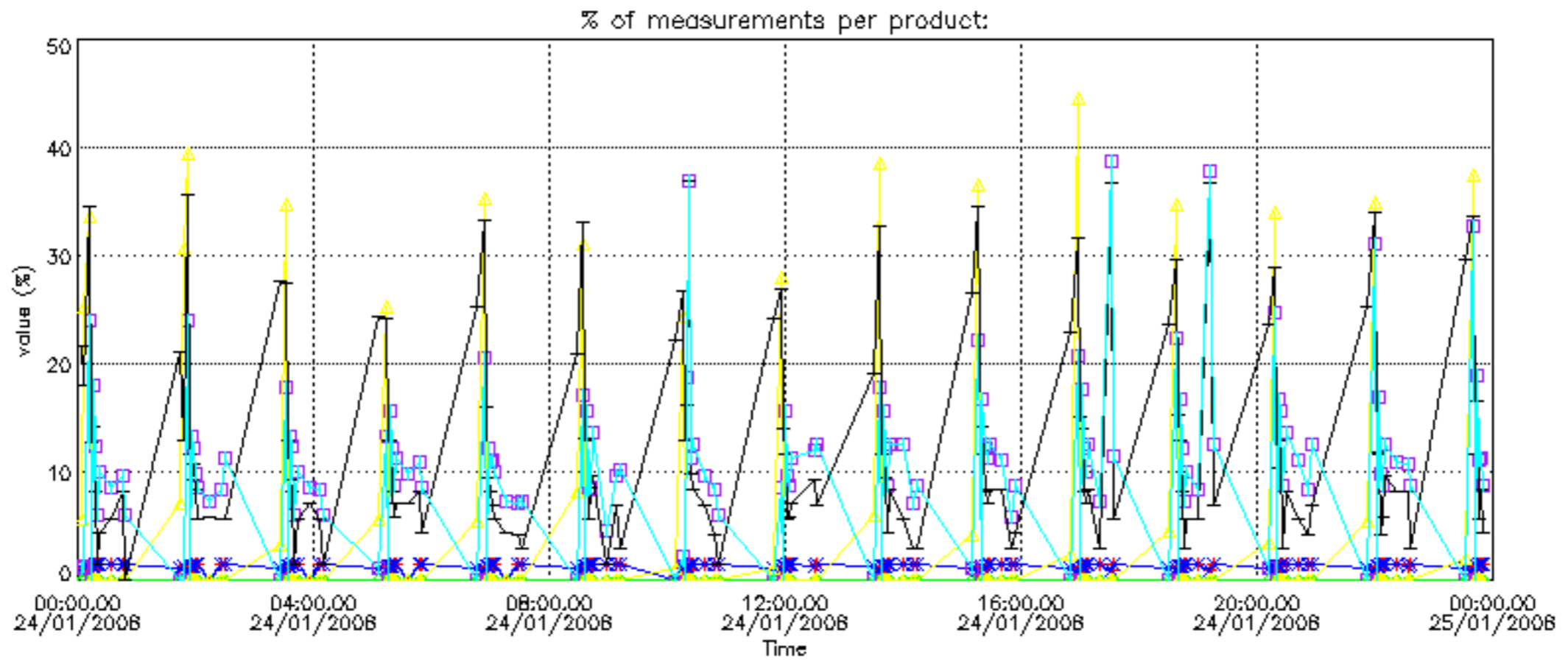
Percentage of flagged data per NO2 profile



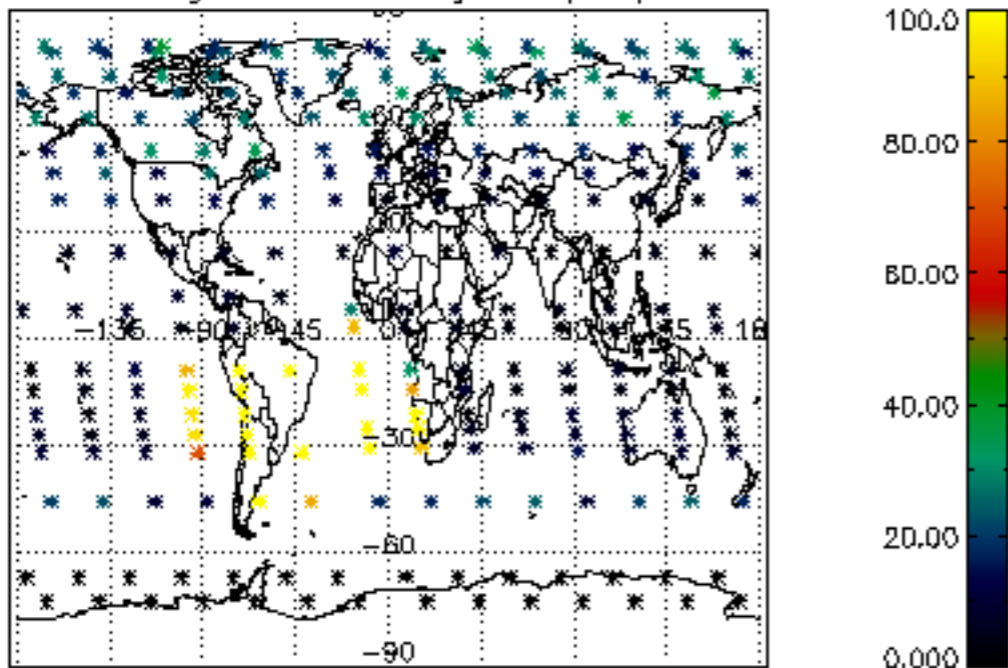
Percentage of flagged data per NO3 profile



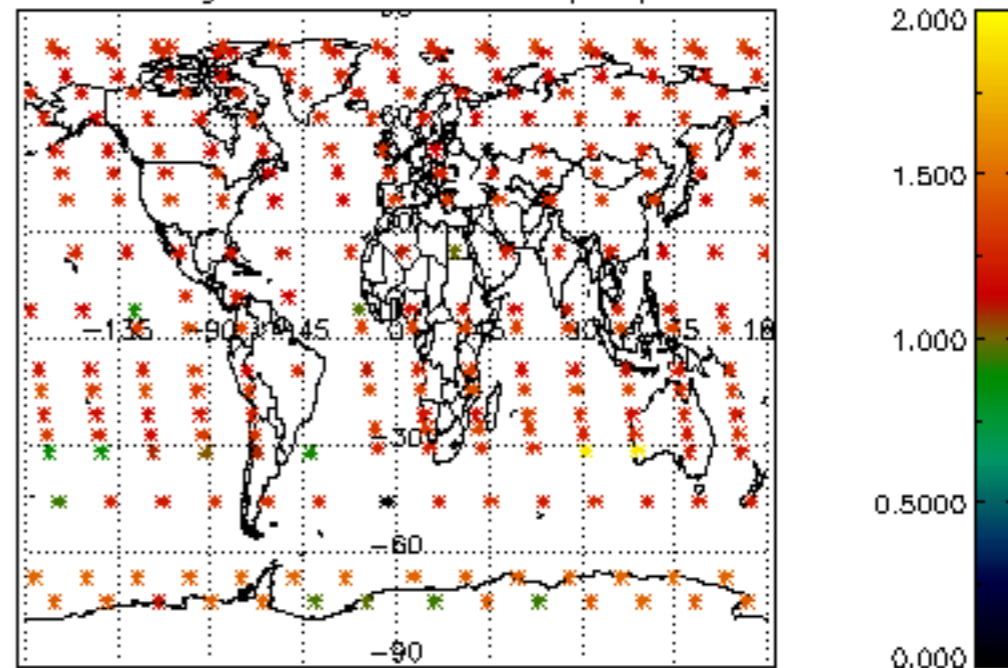




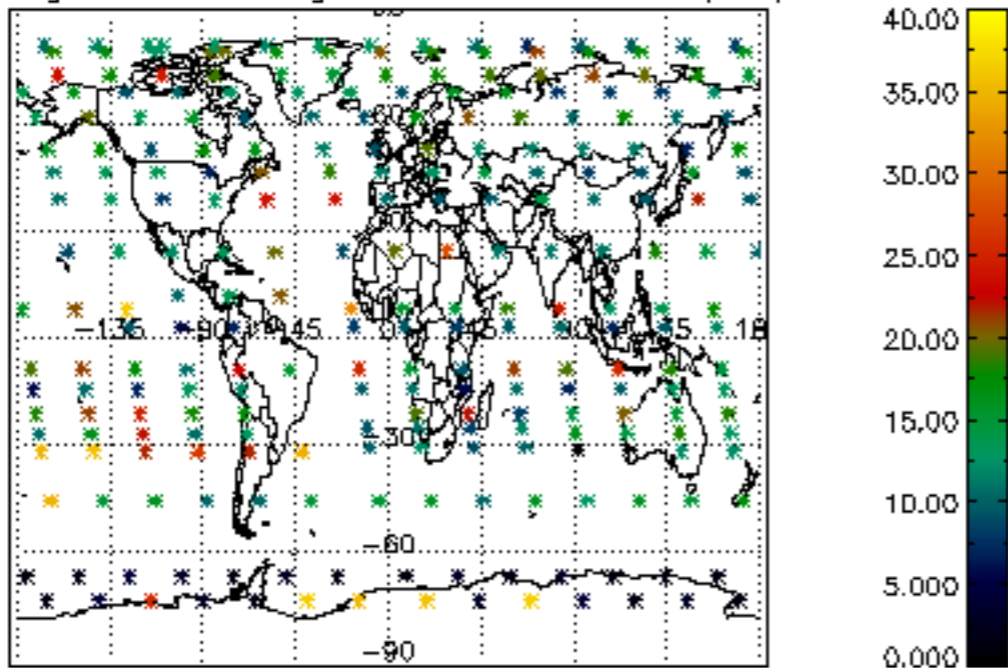
Percentage of cosmic ray hits per profile



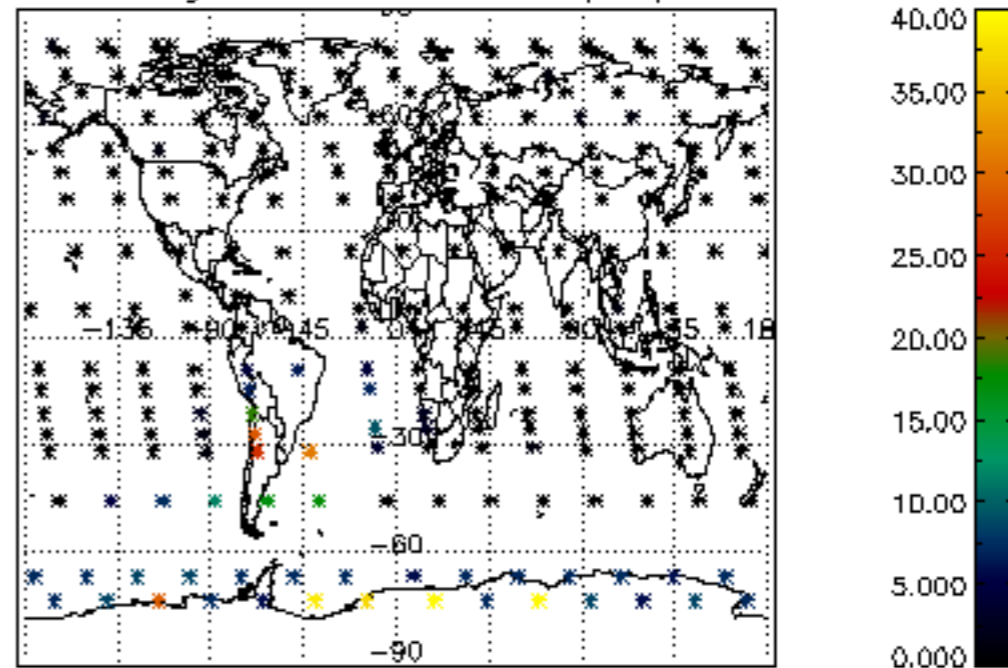
Percentage of datation errors per profile



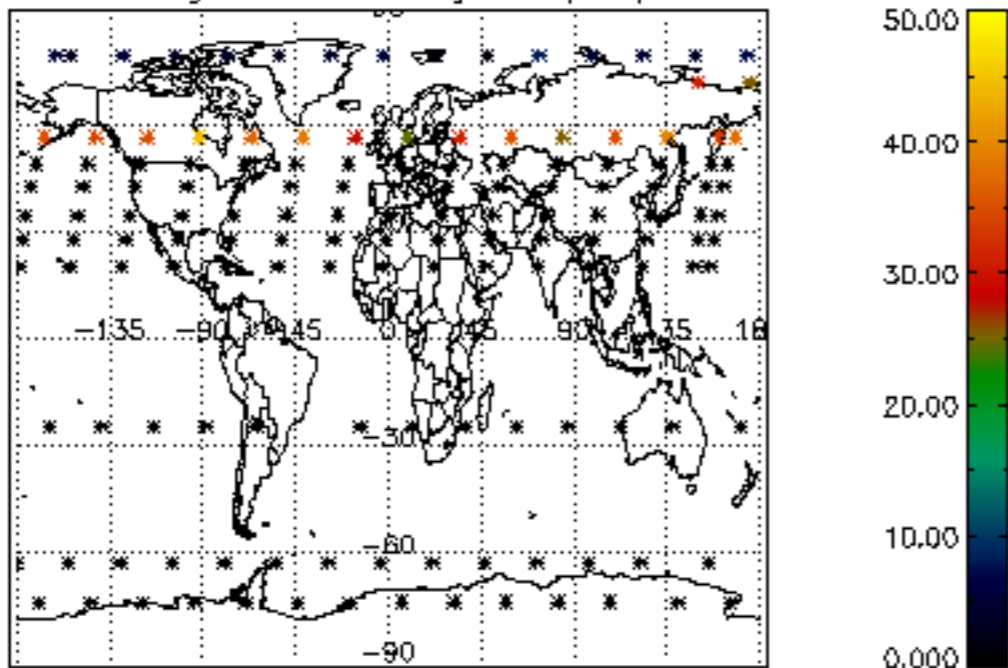
Percentage of star falling outside central band per profile



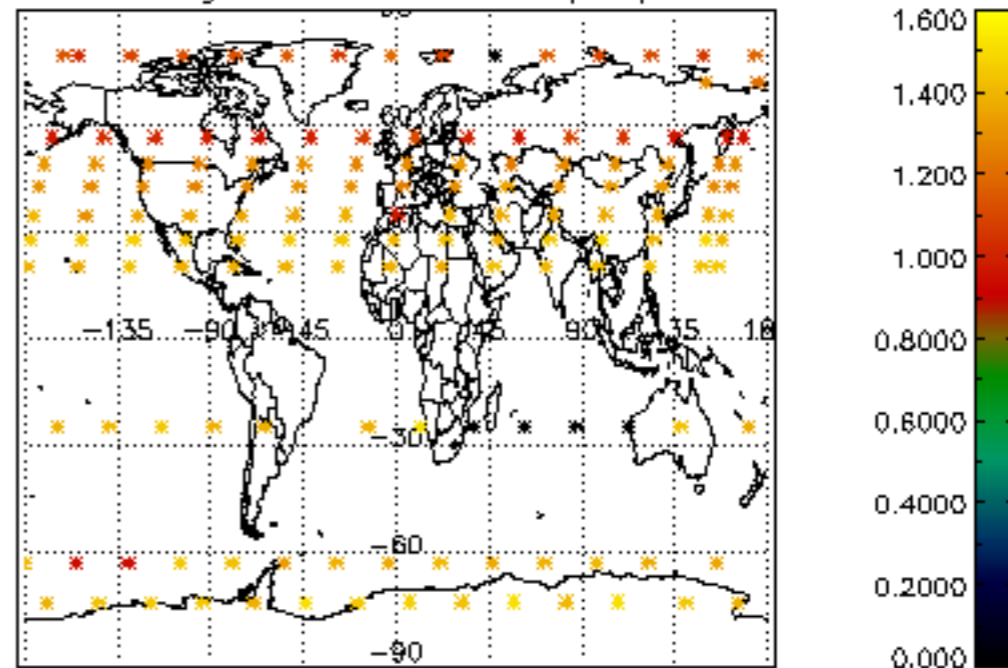
Percentage of saturation errors per profile



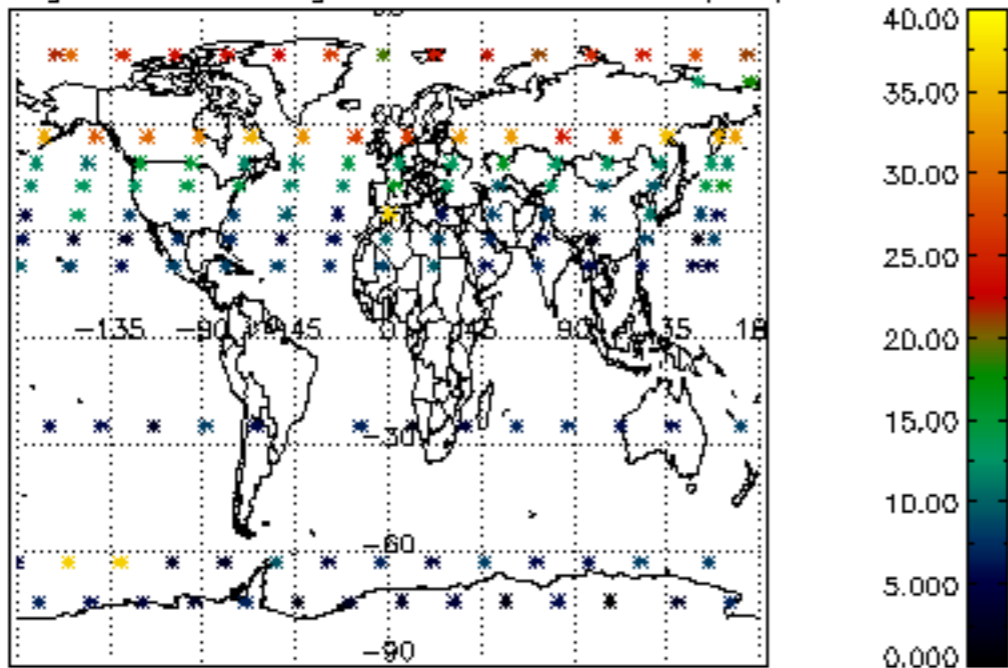
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

